



This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

- + *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.
- + *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.
- + *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.
- + *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

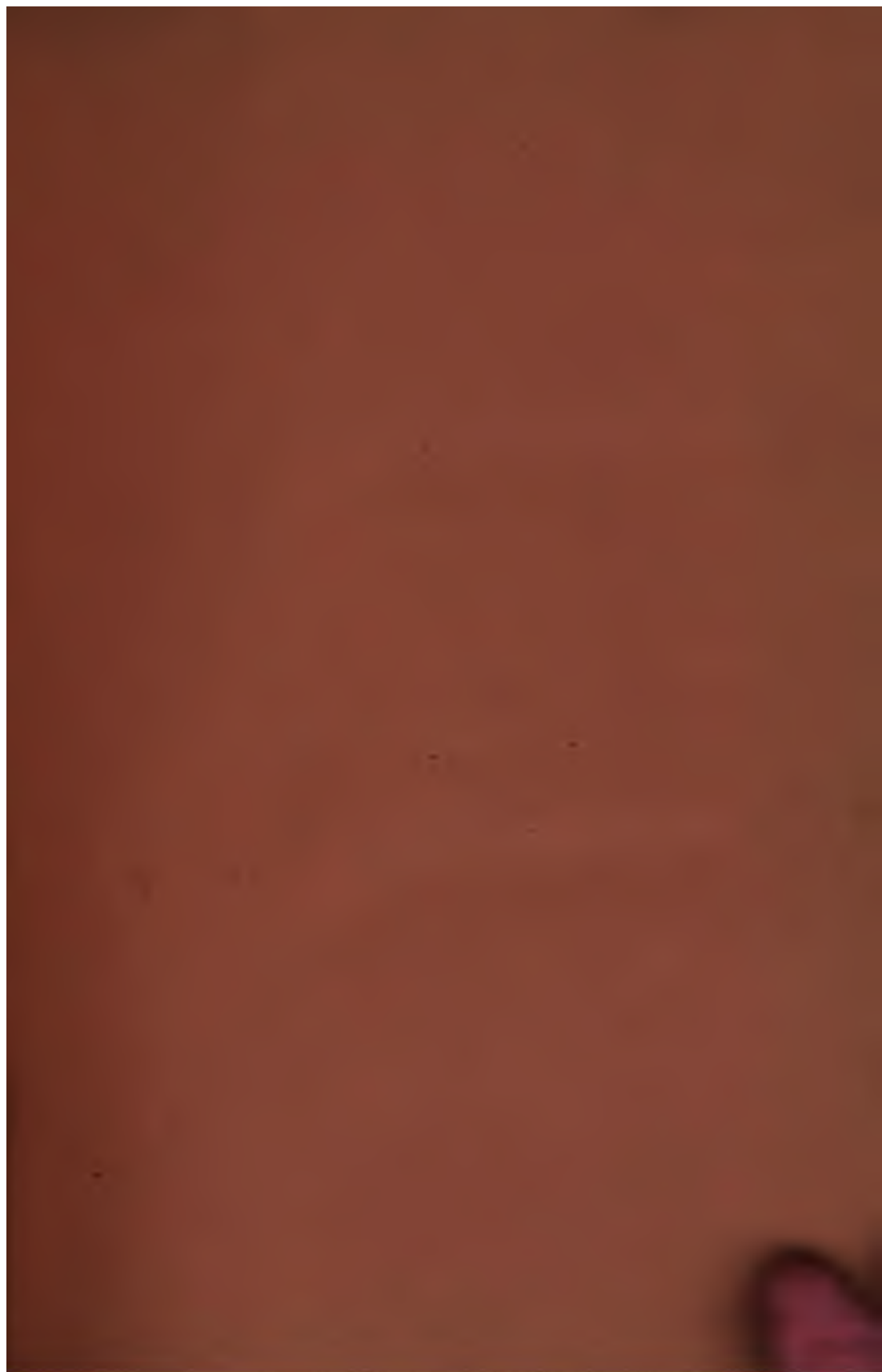
About Google Book Search

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at <http://books.google.com/>

9.13
Oc 2308.76

Recd June 77







①

AN ESSAY

38' 22
1-2

ON

NEW SOUTH WALES,

THE MOTHER COLONY OF THE AUSTRALIAS

BY

G. H. REID,

AUTHOR OF "FIVE FREE TRADE ESSAYS"

HONORARY MEMBER OF THE COBDEN CLUB.

·C SYDNEY:

THOMAS RICHARDS, GOVERNMENT PRINTER, PHILLIP-STREET.

LONDON AND NEW YORK: TRÜBNER & COMPANY.

1876.

Oc 2308.76

1877. Mar. 9
Gift of
John Wiley & Sons,
of New York.

THIS ESSAY

IS

MOST RESPECTFULLY PRESENTED

TO THE

COLONISTS OF NEW SOUTH WALES

BY THE

AUTHOR.

PREFACE.

THE Australasian Colonies have taken advantage of the Centennial Exposition of the United States to make themselves better known abroad; and it is the belief of the Author of the following Essay that New South Wales, as the Mother Colony of the group, and the possessor of remarkable resources, which are combining to make her more progressive than at any previous period, deserves an effort to offer to the world a view of her advantages, condition, and prospects, more comprehensive than has yet been presented.

The Exposition to which we have referred is one of the signs of the times. For the first time a great commonwealth, in seeking to commemorate the achievements of her arms, has risen above local feelings and bitter memories, inviting all nations to a congress of the arts of peace; and her former opponent has been foremost in promoting the success of the undertaking. The cordial way in which Great Britain has united with America in a jubilee over the events of 1776 is, let us hope, the initial of a new and bright page of history. It is especially pleasing to Australians, whose loyalty to the one admits of fraternal regard for the other. The harmony which has prevailed in the "city of brotherly love" between the assembled representatives of all communities speaking the English language encourages the idea of an alliance that would consolidate the power of the Anglo-Saxon race, and at the same time diffuse more freely amongst mankind the benefits of its vigorous civilisation.

The motive for the appearance at the Exposition of exhibits from New South Wales is not that of older Countries. They seek custom: her supreme anxiety is for men. The chief articles of our export trade are raw materials, which find ready markets. But if we could only divert to these shores a stream of industrious emigrants, who would scarcely be missed at home, the fertility it would impart to Australian enterprise would soon disperse its fruits to every quarter of the globe. The idea that the commercial interests of communities are naturally opposed, and that it is better to sell abroad for cash than for goods is not yet quite laughed out of credit, but most reflective minds see the doctrine to be a foolish one, and that it has crippled commerce to the injury of trade everywhere. As men become more enlightened they will perceive national development, wherever it occurs, to be a universal benefit; for the advance of one territory to the higher, leaves room for others in the lower forms of industry. The expansion of the manufactures of Great Britain, so discountenanced in the United States, has yet caused the prairies of the West to blossom with harvests, and when America begins to rival England in commerce she will speed the plough over the broad acres of Australia. The currents of prosperity may have their sources on various continents, but they all reach at last the ocean of human progress.

In order that he might give a complete and accurate statement of facts, the Author has laid himself under obligations to many authorities, to one and all of whom he begs to return his grateful thanks. He particularly desires to acknowledge the kindness of Mr. P. F. Adams, Surveyor-General; Mr. A. Bruce, Chief Inspector of Stock; Mr. H. C. Russell, B.A., F.R.A.S., Government Astronomer; Mr. John Whitton, C.E., Engineer-in-Chief for Railways; Mr. W. C. Bennett, C.E., Commissioner and Engineer for Roads, &c.; and the Reverend W. B. Clarke, F.R.S., F.G.S., F.R.G.S., &c.

TABLE OF CONTENTS.

	Page
PROGRESS OF AUSTRALIA	1
NEW SOUTH WALES—	1
BORDERLANDS, PHYSICAL ASPECT, AND SOIL	3
CLIMATE	6
POPULATION	12
POLITICAL PROGRESS	13
ADMINISTRATION OF JUSTICE	14
INTERNAL COMMUNICATIONS	14
PUBLIC FINANCES	30
LAND POLICY	34
PASTORAL PROGRESS AND RESOURCES	40
AGRICULTURAL PROGRESS AND RESOURCES	46
TIMBER OF THE COUNTRY	72
FISHERIES AND QUATER-BOATS	73
MINERAL PROGRESS AND RESOURCES	74
MANUFACTURES	80
CARRIAGE AND SHIPPING	86
MORAL, SOCIAL, AND INTELLECTUAL CONDITIONS	100
MUNICIPALITIES	105
DEFENCE	107
CHARITABLE AND LITERARY INSTITUTIONS	111
PROGRESS, PROGRESS AND RESOURCES OF THE COUNTRY DISTRICTS	112

	Page.
THE METROPOLIS: ITS PROGRESS AND PROSPERITY	122
PROGRESS OF NEW SOUTH WALES DURING THE PAST SIX YEARS	129
THE POSITION AND ADVANTAGES OF LABOUR IN THE COLONY ...	131
OUR RELATIONS WITH THE MOTHER COUNTRY	142
CONCLUSION	146

APPENDICES.

REMARKS ON THE CLIMATE OF THE COLONY, by Mr. H. C. Russell,	
Government Astronomer	149
A PAPER ON "THE PASTURES AND LIVE STOCK OF THE COLONY,"	
by Mr. Alexander Bruce, Chief Inspector of Stock	156
EXECUTIVE AND PARLIAMENT	170
THE TARIFF	172
IMMIGRATION REGULATIONS	173
STATISTICAL RETURN FOR THE AUSTRALASIAN COLONIES	175

NEW SOUTH WALES,

THE

MOTHER COLONY OF THE AUSTRALIAS.

WE think we may venture to claim for Australia a progress ^T_{of} eclipsing previous examples. Not three generations ago its coast of nearly 8,000 miles was the frontier of a barbarism that had never been disturbed by a settlement of the white man. The rare occurrence of navigable arteries of any volume seemed to make exploration the work of an age. Unknown seas rolled between the discovery and its new masters. There was never so arduous an experiment in colonisation. The enterprise was resolved upon, too, when England was surrounded by dangers. Baffled in the West, and opposed at every point in the East, she yet had heart enough to face a strange world in the South, and plant a new empire on its shores.* Distance does not seem to lessen or growth impair the loyalty of the Australian populations to the Mother Country. But it must not be supposed they cling to

* The notion that Great Britain in founding New South Wales thought only of forming a penal settlement is a grave injustice to Pitt's Administration. The best authority on the subject is the first Governor, Phillip, whose address to the pioneers of the Colony contains the following eloquent passages:—"How grand is the prospect which lies before the youthful nation! Enough of honour would it be to occupy the first position both in regard to time and influence in a country so vast, so beautiful, so fertile, so blessed in climate, so rich in all those bounties which Nature can confer; enough of merit for any nation would it be to throw

open so extensive and highly favoured a country to the occupation of mankind * * * enough I say would it be to enjoy those honours and those advantages, but others, not less advantageous, but perhaps more honourable, await the people of the State of which we are the founders.* * * Such are the circumstances and conditions which lead to the conviction that this State, of which to-day we lay the foundation, will, ere many generations have passed away, become the centre of the Southern Hemisphere—the brightest gem of the Southern Ocean."—*Flanagan's History of New South Wales*, vol. i, pp. 30-4.

her from a sense of weakness or a want of spirit. Let those who doubt their vigour bestow a glance upon their achievements. Within forty years the colonists, with the concurrence of the Imperial Government, have fringed this continent with infant States already able to exercise the powers of elaborate political systems, and sustaining over their vast territories forms of government which blend the freest principles of the American with the most venerable safeguards of the British Constitution. If proofs of material progress are demanded, we can point to a population which rose in thirty years from 214,000 to 2,000,000 souls, or 834 per cent.; whilst during the same period the population of Canada and the United States increased by 660 and 126 per cent. We can point to a trade which rose in the same generation from less than £6,000,000 to over £63,000,000, or 950 per cent.; whilst the wonderful increase in British trade was only 400 per cent., that of the United States 335 per cent., and that of Canada about 650 per cent.; and if told that Australian progress has seen its best days, we reply that the trade of Australasia rose from £63,000,000 in 1871 to £87,000,000 in 1874, an increase of 38 per cent. in three years. If we inquire further, we learn that upwards of 5,600,000 tons of shipping entered and cleared the ports of the Colonies in 1874; that there are 70,000,000 head of live stock on our pastures; and nearly 5,000,000 acres of land under cultivation. There are 2,000 miles of railway open, and a far greater length in progress or projected. Upwards of 26,000 miles of telegraph, to which additions are being rapidly made, unite every part of the group with the rest of the world. The annual revenues of the several Governments approach £14,000,000 sterling. The reader has only to contrast these facts with our sparse population to get a true idea of Australian progress.

The surprising indifference shewn a few years ago by many Home politicians to the integrity of the Empire and the stability of British greatness, for they are allied, has dis-

appeared. Still it may not be out of place to introduce facts in proof of the growing importance of the Australian trade to the English people. The value of the export from the United Kingdom to Australasian ports in 1851 was £2,807,356. In 1871 it was £10,051,982.* In other words, our markets for British industry and commerce have been enlarged in twenty years by over 250 per cent. As the export for 1871 of British produce and manufactures to all Colonial dependencies was £33,196,735, that to Australia and New Zealand was 30 per cent. of the whole. The proportion must now be much larger, for the export in 1873 to these Colonies rose to a declared value of £17,610,152,† an increase of no less than £7,558,170, or 75 per cent., in two years! These facts will probably do more to convince timid vestrymen in England of the real and prospective value of the Colonial Empire, than a eulogy of the British pluck, sagacity, and enterprise to which they owe it.

But our immediate purpose is to describe the progress, resources, and condition of that part of the British dominions known as New South Wales, which is the Mother Colony of the Australias. It is well known that in the year 1770 Captain Cook planted the English flag on this coast; that in 1787 Captain Phillip was despatched to occupy the territory, in command of an expedition consisting of one frigate, an armed tender, and nine transports, conveying about 1,000 souls; and that the fleet having safely arrived, the COLONY OF NEW SOUTH WALES was founded on the 26th January, 1788, on the margin of one of the coves in the harbour of Port Jackson, now lined with the wharfs of the metropolis. It may be said, therefore, the Colony is eighty-eight years old. But in one sense she is only "sweet sixteen." If we look upon her as the nurse of the other Australian Colonies, she is

* *Annual Statement of the Trade of the United Kingdom for 1872*, p. 7.

† *Statesman's Year Book for 1875*, p. 256.

eighty-eight; but if we take her as she now appears she is only sixteen. For fifty years of her existence New South Wales was Australia. All the celebrated expeditions of Bass and Flinders by sea, Hume, Sturt, Mitchell, Strzelecki, Leichhardt, and Kennedy by land, started from Sydney, and to Sydney they retraced their steps. In that city were fought those contests for the political rights of Englishmen which have made the name of WENTWORTH an honoured one. In 1851, the now great Colony of Victoria was formed out of the district of Port Phillip. In 1859, we lost on the north the splendid province of Queensland. So, territorially speaking, the Colony we have to describe is not that of 1788, or 1851, but that of 1860. Those who imagine that the extent and resources of New South Wales were dwarfed by these separations have a vague idea of the area and natural advantages the Colony still possesses.

Geographical descriptions are not popular reading, and the curious can procure full information from other sources.* We content ourselves, therefore, with a brief outline of the boundaries and extent of the country. Our eastern boundary of about 800 miles is washed by the Pacific Ocean. From Cape Howe, $37^{\circ} 28'$ S. latitude, and $150^{\circ} 8'$ east longitude, a land line to the river Murray divides us from Victoria on the south, then the Murray on the south and south-west, and from about 34° the boundary striking due north from the river follows 141° east longitude. The northern boundary is traced by the Macpherson and Dividing Ranges, the Dumaresq and Macintyre Rivers, and the 29° S. latitude. The greatest length of New South Wales is 900 miles; its greatest breadth about 850 miles; mean breadth 500 miles. The superficial area is 323,437 square miles. That is to say, the Colony is as extensive as the German Empire and Italy combined; or as France and the United Kingdom. It is nearly four times the size of the neighbouring Colony of Victoria.

* A sketch map will be found in the Appendix.

In observing the physical aspect of New South Wales the eye rests at once upon the Great Dividing Chain of mountains, which stretches the whole length of the Colony, dividing its area into what may be called (1) the Coast and Mountainous District; (2) the Northern and Southern Tablelands; (3) the Western Slopes, undulating for a considerable distance until they reach (4) the Great Saltbush Plains. Fourteen rivers receive the easterly flow; the chief being the Hawkesbury, 330 miles; the Hunter, 300 miles; the Shoalhaven, 260 miles; the Clarence, 240 miles; the Macleay, 190 miles; and the Manning, 100 miles. The soil of the flats of the coast district is alluvial, of remarkable richness near the watercourses, and upon which there is a variety of heavy timber and scrub. The soil of the immense western and interior slopes available for agriculture is composed chiefly of red and chocolate loam, well grassed but thinly timbered, generally with a species of the *eucalyptus* known as box. The saltbush country succeeds, stretching to our western and north-western boundaries. It consists of red, loamy plains, of the same character as the slopes, but without timber; except in those parts which are liable to floods in winter. The soil of the plains is loose, and in very dry weather the grass nearly disappears; but as the country becomes stocked the tread of the animals binds the surface; the grass acquires closeness and strength, and the saltbush gives way to the characteristics of the slopes. As a consequence, the rain that falls begins to form watercourses, waterholes become creeks, and the streams increase in volume. All the great rivers of the Colony are on the western watershed. The Murray River, which takes its rise in the south-eastern corner of New South Wales and makes its way to the coast of South Australia, has in this Colony a length of 1,120 miles. The Murrumbidgee, taking its rise not very far north of the source of the Murray, is about 1,350 miles in length, receiving the waters of the Lachlan, 700 miles, and flowing into the Murray at Balranald

Physical aspect
and soil.

The Darling, 1,160 miles, has its source at the northern end of the Great Range, and flows north-west to the Queensland boundary, then west and afterwards south and south-west, reaching the Murray at last at Wentworth, about 100 miles from the junction of the Murrumbidgee. The affluents of these great streams are numerous. The longest flow into the Darling, namely, the Macintyre, 350 miles; the Gwydir, 445 miles; the Namoi, 600 miles; the Castlereagh, 365 miles; the Macquarie, 750 miles; and the Bogan, 450 miles. Besides the Great Dividing Chain (highest point Mount Kosciusko, 7,176 feet), with its seven main and their nineteen subordinate branches, the majority of which are lateral, there are the Coast Ranges, three in number (highest point, Mount Coolungera, 3,712 feet), two Interior Ranges (highest point, Mount Arrowsmith, 2,000 feet), and there are isolated mountains (highest point, 2,900 feet).

Climate.

The climate of New South Wales bears a very high character. Great diversity of elevation and a stretch over nine degrees of latitude at a favourable distance from the Equator afford many variations of temperature, from that of snow to great heat; but not a single locality in the whole expanse can be pronounced unhealthy. Indeed, so pure is the atmosphere in the districts where the thermometer shews the highest readings that the heat is never intolerable; whilst during at least six of the twelve months the climate is delightful. There is no sky clearer by day or more brilliant at night than the Australian. Fine specimens of manhood are to be met with in every district. The endurance, pluck, and activity of Australian bushmen are proverbial. All the sports of Old England flourish, especially cricket and rowing. Trickett, who recently won the sculling Championship of the Thames, was born and bred near Sydney. The most serious disadvantage to which the Colony is exposed is

the occurrence of dry seasons at uncertain intervals. As to the cause of these droughts, the Astronomer of the Colony observes :—

“That the proximate cause of these droughts is an unusual southerly set of the Equatorial currents is manifest by the low barometer, high temperature, and great prevalence of north-westerly and north-easterly winds. As the prevalence of these winds excludes the southerly or rain-bearing winds we necessarily get less rain than usual, and when the sun has turned to go northwards the Equatorial currents move with him, and the southerly (polar) current rushes in with thunder and lightning—sure indication of the meeting of the two currents—and rain follows.”*

The effects of a very dry season are most severely felt by the pastoral settlers. Those of them who have the means and the sense to provide against dry seasons may escape with small loss. It seems certain that the Colony is in a far better position to stand a prolonged drought than formerly. That of 1875 was certainly the longest during the past thirty-five years, but, although most of the runs were heavily stocked, some overstocked, the losses have borne no proportion to former experience. As the fall of rain is ample, means for storing it will grow with settlement.†

Without further preface, we would quote a few authorities. Count Strzelecki, to whose scientific explorations we are greatly indebted, makes the following observations :‡

“The thermometrical fluctuations assimilate New South Wales and Van Diemen’s Land (Tasmania) to a tropical region ; the summer season of the two Colonies resembles the summer of that part of Western Europe which lies between latitudes 41°53-55°57 ; and the winter, that part of the Mediterranean which is enclosed between the coasts of Spain, Italy, France, and Algeria, extending to Tunis and Cairo ; and thus is concentrated within the space of 11° of latitude, the elements of seasons most requisite and essential for exalting all the energies of animal and vegetable life.

* Mr. Russell, in a letter to the *Sydney Morning Herald*, 21 December, 1875.

† For information as to the rainfall and temperature in various parts of New South Wales, we refer our readers to an appendix which the Government Astronomer has with great kindness prepared for the present publication.

‡ *Physical Description of New South Wales and Van Diemen’s Land*, London, 1845.

"Independently, however, of comparisons and analogies, the climatic condition of New South Wales and Van Diemen's Land is represented in the most favourable light by its rich *flora*, and by the healthy condition of its aborigines and indigenous animals.

"But what mainly illustrates the fertility and salubrity of both these countries is the healthiness of the English settlers who have taken root in the soil. No endemic disease and seldom epidemic of a grave character prevails; and if individual indisposition, or even partial deterioration of the progeny is sometimes seen, it is to be traced to the pertinacity with which the English race cling to their original modes of living wherever they settle, and however different their adopted may be from their native climate. It is to the abuse of strong wines, malt liquors, and spirits, and particularly to the excessive consumption of animal food of the richest description, and even to the mode of clothing and housing, that individual disease, such as dyspepsia, premature decay of teeth, and affections of the brain may be attributed.

"The climate of New South Wales and Van Diemen's Land, further, has never been shown to have exercised any of those deadly or deleterious effects on the constitutions of the first European emigrants, or of those who have followed them, which many climates vaunted for their excellence have done. pp. 236-8.

"New South Wales receives a larger quantity of rain than Brussels, Berlin, Geneva, York, and lastly London, so celebrated for its humidity." p. 236.

In the article on Australia, the *Encyclopædia Britannica* observes:—

"The climate of New South Wales has been pronounced by good authorities to be one of the most healthy and salubrious on the face of the earth."*

Sir Edward Creasy, in his recent work on the "Constitutions of the Britannic Empire," published after a visit to the Colonies, bears witness that—

"Some parts of Australia (*New South Wales for instance*) are reckoned among the best climates in the world for the health and comfort of man and beast." p. 307.

In the *Australian Handbook* for 1875 it is remarked:—

"The climate of New South Wales is considered to be extremely salubrious. The healthy character of the climate is shown by the fact that, excepting ophthalmia, epidemic diseases are scarcely known."

* 1854 edition, vol. iv., p. 279.

One of the most satisfactory tests is the rate of the mortality of infants and children. Applying that criterion to the vital statistics for the five years 1869-73 of the Colonies on the continent, we find that New South Wales shews the best results.

1. *Ratio of deaths of infants under 1 year old to the births of same period.*

	Per cent.
New South Wales	9'57
Queensland	11'07
Victoria.....	11'86
South Australia	14'24

2. *Percentage of total deaths.*

	Under 5 years.	Between 5 and 10.
New South Wales	42'14	45'60
Victoria	45'50	50'27
Queensland.....	46'33	49'09
South Australia	54'17	57'81

3. *Ratio of deaths of children to 1,000 persons of all ages living.*

	Under 5 years.	Between 5 and 10.
New South Wales	5'61	6'07
Victoria	6'58	7'27
Queensland.....	6'93	7'34
South Australia	7'28	7'77

These comparisons are taken from an ably compiled volume of Tasmanian statistics.* The fact that the oldest Colony heads the list speaks well for the Australian climate.†

We could not give in a few words a better idea of the genial nature of the climate than that which we obtained a short time ago, in the course of a walk through the Botanical Gardens of Sydney. We saw flourishing in the open air, in one part of the Gardens, sturdy specimens of the *Camelia* of China, *Palm* of the Mauritius, *Magnolia* of North America,

* *Statistics of Tasmania for 1874*, pp. xxv-vi. Tasmania is the healthiest of the group.

† The Australian Mutual Provident Society, established in Sydney in the year 1849, is an illustration from another point of view. The life assurance premiums of this Society are slightly lower in rate than the English tables, yet already a reserve fund of £1,708,000 has been accumulated, and large bonuses have been returned to members, the total of the last being no less than £235,000. This very prosperous Society is the largest of its age in the British Empire, having a premium income of £314,000, and assuring over £9,000,000, by 23,240 policies.

Kigelia of Mozambique, *Evergreen Oak* and *Myrtus* of the South of Europe, *Poinsettia* and *Yucca* of South America, *Michelia*, *Rose Apple*, and *Bamboos* of the East Indies, *Hedera* of Ceylon, *Cantua* of Peru, *Jacaranda*, *Franciscea*, and *Cherry* of Brazil, *Berberis*, *Cupressus*, and *Pinus* of the Himalayas, *Araucaria* (120 feet high) of Norfolk Island, *Hibiscus* of the Islands of West Pacific, *Salisburia* of Japan, *Mangoe* and *Star Apple* of the West Indies, *Arbutus* of Ireland, *Musa Enseta* of Abyssinnia, *Aleurites* of the South Sea Islands, *Astrapea* and *Tanghinia* of Madagascar, and *Argania* of Morocco. Further on were *Willows*, the *Plane*, *Alder*, *Hornbeam*, *Spanish Chestnut*, and the *English Oak*, in as great luxuriance as in their Old World *habitat*, side by side with *Palms* from Ceylon, the East and West Indies, the South Sea Islands, Madagascar, the Himalayas, and America; as, for instance, the *Palmetto*, *Date Palms*, different kinds of the *Cocoa-nut* (the common kind excepted), the *Kittul* or *Toddy Palm*, *Chæmerops*, *Areca*, *Prichardia*, *Sabal*, *Jubæa*, *Kentia*, *Rhapis*, and *Livistonina*. Again, we saw in the same division, tropical *Damaras*, with *Abies* from the Himalayas, the *Sequoia* from Puget Sound, the *Cedars of Lebanon*, the deciduous *Cypress* of America, and a variety of the *Dracæna*. There were also pointed out to us, by the courteous Director of the Gardens,* the *Cinnamon Tree* of Ceylon, the *Hazel Nut* of Europe; the *Pomegranate*, *Sugar Cane*, *Tea-plant*, and *Allspice*; and the *Elm* and *Lime Tree* of the North of Europe, blending their branches with a *Coffee Tree* in full bearing.

Population.

As everybody knows, population is the chief factor of progress. The climate of a country may be genial, its soil fertile, its minerals abundant, and its area extensive, but by human energy alone can these advantages be turned to account. The descriptions which follow will convince the most critical reader that in New South Wales he views a territory

* Mr. Charles Moore, F.L.S.

richly endowed with the elements of industrial greatness. If anything can impress him more, it will be surprise that European emigrants fail to make their way in larger numbers to a region where there are such broad avenues to immediate plenty and eventual independence. Distance, it is true, obscures our attractions. Yet it is strange that an age which has made the longest voyage enjoyable should not stimulate in our favour to a greater degree the adventurous spirit which has led the European through all latitudes, and could easily guide him now to a country in which he might seize all the opportunities a new world affords, without losing the comforts and advantages of civilisation.

Although the disparity between our resources and our population is still enormous, it must not be supposed that the increase of the latter has been slow. On the contrary, after losing in 1851 so attractive a dependency as Victoria, and in 1859 so grand a territory as Queensland, there has been a rapid growth of population. From the foundation of the Colony in 1788 down to the year 1835, a period of forty-seven years, the population grew to 70,000 souls.* According to particulars furnished in 1836 by Governor Sir Richard Bourke to the Secretary for the Colonies, there were then 68,871 souls in the nineteen counties surrounding the chief settlement at Sydney, and forming the whole of the "settled" territory, which covered an area of 35,740 square miles; and beyond the counties there were only 2,968 individuals to 288,000 square miles. According to our last Census, that of 1871, there were 376,583 persons in the counties referred to, and 127,398 in the interior beyond them, now divided into thirteen pastoral districts or ninety-nine new counties. Thus there has been an increase of 447 per cent. in the population of the old counties, and there are 125,000 souls in the other extensive districts, which in 1835 were barely known. If we take a

* This growth of nearly fifty years is considerably less than the increase during the past three years.

shorter period, and compare 1861 with 1871, the progress is still satisfactory. The following are the rates of increase in the respective districts :—

PASTORAL DISTRICTS.

	Increase of 1871 over 1861.
Albert	322 per cent.
Bligh	107 "
Clarence	174 "
The Darling	102 "
The Gwydir	81 "
The Lachlan	26 "
Liverpool Plains.....	103 "
Monaro	51 "
Murrumbidgee	93 "
Macleay	280 "
New England.....	75 "
Warrego	1,109 "
Wellington	188 "

Average increase in the pastoral districts during the years from 1861 to 1871, 89 per cent.

OLD COUNTIES.

	Increase of 1871 over 1861.
Argyle	28 per cent.
Bathurst	50 "
Bligh	161 "
Brisbane	96 "
Camden	1½ "
Cook	47 "
Cumberland*	34 "
Durham	18 "
Georgiana	128 "
Gloucester	27 "
Hunter.....	17 "
King	59 "
Macquarie	37 "
Murray.....	22 "
Northumberland.....	31 "
Phillip	282 "
Roxburgh	14 "
St. Vincent	35 "
Wellington	29 "
Westmoreland	8 "

Average increase in the counties during the ten years, 30 per cent.

* Metropolitan county. The counties in this table number twenty, Macquarie having been added to the nineteen formerly described as the "limits of location."

The general results of the Census of 1871 shewed the following division :—

Sydney and suburbs	134,736
Towns and villages	99,426
Rural	267,417
Shipping.....	2,402
Total.....	<u>503,981</u>

According to the estimates of the Registrar-General, Mr. E. G. Ward, the population of the Colony on 31st December, 1875, was—

Males	334,461
Females	272,191
	<u>606,652</u>

That is to say, our population has increased since 1871 by 102,671 souls, or over 20 per cent., in less than five years. Looking at the Registrar's tables we find that from 1871 to 1875 the excess of arrivals over departures was 40,412 persons, and that the last year of the five shewed an increase of 120 per cent. on the first. The growing popularity of New South Wales as a field for settlement is justified by the progress of all branches of industry. But favourable as the figures are they do not include a large number of the most valuable class of colonists, we mean agricultural settlers, who have come across our south-western border from Victoria since the last Census, attracted by the ample area, liberal land laws, light taxation, and cheap living in this Colony.* The Census of 1881 will add largely to the estimates of the Registrar-General, who can obtain no account of the movement of population on the borders.

The history of the political progress of the Colony is brief but remarkable. Questions which have not yet been settled in the old world have been peacefully solved in New

Political
progress.

* A recent issue of the *Border Post* estimates that upwards of 10,000 persons have crossed into Riverina since the Census of 1871.

South Wales with an ease and rapidity which leave us in doubt whether more to admire the vigour of our own patriots or the liberality of Imperial statesmen. In 1824 the liberty of the Press and the first instalment of the right of trial by jury were conceded. In 1836 the principle of religious equality became law. In 1842 the right of municipal election was exercised for the first time. In 1843 the Legislative Council was made partially elective. In 1855 an Act conferring a CONSTITUTION on the people of New South Wales received the Royal Assent. In 1856 the FIRST RESPONSIBLE MINISTRY was sworn in. In 1858 manhood suffrage was adopted. Within a few years we have risen from a condition of pupilage to political manhood, and enjoy a form of government that unites with the vital principles of the British system advantages of its own; for it has reconciled the supremacy of Monarchy and the stability of Aristocracy with the free play of Democratic power. The efficacy of our Three Estates corresponds with their usefulness, for the Queen's Representative is the first in dignity; the Legislative Council is the first in stability; and the Legislative Assembly is the first in power.* Both Houses closely follow, in all possible respects, the practice of the British Parliament.

The Cabinet in New South Wales consists of the holders of the following offices, against which we place the names of the present Administration :—

Colonial Secretary and Premier	The Hon. John Robertson, M.P.
Colonial Treasurer	The Hon. Alexander Stuart, M.P.
Minister for Justice and Public	
Instruction	The Hon. J. Docker, M.L.C.
Attorney General†	The Hon. W. B. Dalley, M.L.C.
Secretary for Lands	The Hon. Thomas Garrett, M.P.
Secretary for Public Works....	The Hon. John Lackey, M.P.
Postmaster General	The Hon. J. F. Burns, M.P.
Minister for Mines	The Hon. John Lucas, M.P.

* Legislative Councillors hold their seats for life. Members of the Assembly sit under a Triennial Act.

† The Attorney General is not summoned to the Executive Council.

We give a view of the administrative system of New South Wales, for the benefit of those who have a vague idea of Australian institutions :—

THE COLONIAL SECRETARY is charged with the business connected with—

Legislative matters.

Great Seal.

Naval and Military Establishments, including the Volunteer Corps.

Foreign Correspondence.

Police.

Gaols and Penal Establishments.

Medical Establishments, including Vaccination and Lunatic Asylums.

Registration and Statistics.

Municipal Institutions.

Government Gazette.

Proclamations, Commissions, and other Instruments under the Great Seal.

Naturalization of Aliens.

Ecclesiastical Establishments.

Industrial and Reformatory Schools.

Hospitals and Charitable Institutions.

Patents.

Immigration.

And all other matters of internal arrangement not confided to any other Minister.

He is responsible for the supervision and control of the following Officers and Departments :—

Inspector General of Police.

Visiting Justices, and

Officers in charge of Gaols, Penal Establishments, Lunatic Asylums.

Industrial and Reformatory Schools.

Sydney and Suburban Cemeteries.

The Medical Adviser.

The Registrar General.

The Auditor General.

Immigration Agent.

And he corresponds with—

The Judges of the Supreme Court.

The Law Officers.

The President of the Legislative Council.

The Clerk of the Parliaments.

The Speaker of the Legislative Assembly.

The Clerk of the Legislative Assembly.

The Returning Officers.

The Clerk of the Executive Council.
 The Consuls of Foreign States.
 The Secretaries of Colonial Governments.
 The Agent General.
 Land and Emigration Commissioners, London.
 The Heads of the several Churches.
 The Governing Bodies and Inspectors of Charitable Institutions.
 Municipal Authorities.

And also in certain cases with—

The Sheriff.
 The Chairmen of Quarter Sessions.
 The Prothonotary of the Supreme Court.
 The Registrar General.
 The Curator of Intestate Estates.
 The Crown Solicitor.
 Benches of Magistrates.

THE MINISTER FOR JUSTICE AND PUBLIC INSTRUCTION is charged with the business connected with—

The Administration of Justice generally.
 Public Education.
 Judicial Establishments.
 Stipendiary Magistrates.
 Petty Sessions.
 Advising Government on all Legal Questions.
 Preparation of Legal Instruments and Contracts.
 Preparation of Bills, assisted by Parliamentary Draftsmen.
 Orphan Schools.
 Observatory.
 Literary and Scientific Institutions.
 Execution and Remission of Sentences.
 Free Public Library.
 National Gallery of Fine Arts.

He is responsible for the supervision and control of—

The Sheriff.
 The Crown Solicitor.
 Clerks of the Peace.
 Parliamentary Draftsmen
 Stipendiary Magistrates and Clerks of Petty Sessions.

He corresponds with—

The other Ministers, on all questions on which legal opinions may be required.
 The Judges, Sheriff, and the Officers of Supreme Court, on certain matters.
 The Attorney General.
 The Coroners.
 Benches of Magistrates and Stipendiary Magistrates.

THE COLONIAL TREASURER AND SECRETARY FOR FINANCE AND TRADE is charged with the business connected with—

- Finance generally.
- Trade and Commerce.
- Revenue and Expenditure.
- Taxation.
- Public Debt.
- Loans.
- Customs.
- Distillation.
- Printing and Bookbinding.
- Duty and Postage Stamps.
- Stores and Contracts relating thereto.
- Emigration.
- Engagement and Discharge of Seamen.
- Quarantine.
- Gunpowder Magazines.
- Abattoirs.
- Leasing Quays, Wharfs, and Ferries.

This Minister is responsible for the supervision and control of the following Departments, viz.:—

- Collector of Customs.
- Chief Inspector of Distilleries and Refineries.
- Commissioners of Stamp Duties.
- Government Printer.
- The Superintendent of Stores.
- Ordnance Storekeeper.
- Gunpowder Magazines.
- Health and Immigration Officers.
- Shipping Masters.
- Inspector of Abattoirs.
- Harbours, Light-houses, and Pilots.*
- Paymaster of Imperial Pensioners.

He also corresponds with—

- The Banks, and with all Government Officers and Departments, on the subject of Collecting, Expending, and Accounting for the Public Revenues.

THE SECRETARY FOR LANDS is charged with the business connected with—

- The Survey, Sale, Occupation, and Management of Crown Lands.
- The Reserves for Recreation and other public purposes.
- Botanical Gardens.

* These are under a Marine Board—partly official, partly elective.

The Church and School Estates.

Aborigines.

Cemeteries, excepting those of Sydney and Camperdown.

This Minister is responsible for the supervision and control of the following Officers and Departments, viz.:—

The Surveyor General.

The Chief Commissioner of Crown Lands.

The Inspectors of Sheep and Cattle.

The Director of the Botanical Gardens.

He corresponds with—

The Commissioners of Claims to Grants of Land.

Trustees of Commons, Reserves for Recreation and other public purposes.

THE SECRETARY FOR PUBLIC WORKS is charged with the business connected with—

The erection of Electric Telegraphs.

Improvement of River Navigation, Ports, and Harbours.

Formation and repair of Docks and Wharfs.

Works of Defence.

Public Works and Buildings, Roads, Bridges, and Railways.

This Minister is responsible for the supervision and control of the following Officers and Departments, viz.:—

Railways.

The Engineer-in-Chief for Rivers and Harbours.

Public Roads.

The Colonial Architect.

Construction of Electric Telegraphs.

Fitzroy Dock.

THE POSTMASTER GENERAL is charged with the business connected with—

Postal arrangements and Contracts and business generally.

Working of Electric Telegraph Department.

Money Order Office.

Government Savings Bank.

THE SECRETARY FOR MINES is charged with—

The business connected with Gold Fields.

Collieries.

Mineral and Gold Mining Leases.

Survey of Land for Mining purposes.

Administration of Justice in connection with Mining.

Geological Survey.

Geological Museum.

This Minister is responsible for the supervision and control of—

The Wardens.

Mining Registrars.

Mining Surveyors.

Examiner of Coal Fields.

Inspector of Collieries.

Geological Surveyor.

In the dispensation of justice, marked deference is paid to the rules of the British Courts. All our leading Judges have come from the English Bar, with one exception, the present Chief Justice, Sir James Martin, whose talents nevertheless won for him long ago the rank of Queen's Counsel. The common law of the Mother Country is as valid in the humblest Court of this distant province as at Westminster. Bearing in mind the extent of the territory, the administration of justice is very efficient. Judges of the Supreme Court make progresses through the Colony to try grave criminal cases. Judges of a lower rank decide civil cases and try offences of minor degree in the interior. In every district there is a Bench of Magistrates, generally presided over by a paid Police Magistrate. Life and property are as secure as in older Countries. The statistics of crime shew that the convictions for felonies and misdemeanors, which were 770 in 1866, decreased to 708 in 1875, although the population had increased by 40 per cent. At the time we write there is not a district without police surveillance, nor is there a locality where the risk of violence is greater than in the United Kingdom.

Internal communication is only second in importance to the administration of justice and the protection of life and property. In this respect the Colony has many obstacles to overcome. All the large rivers flow away from our coast. We have to provide roads and bridges over a surface as spacious as that of two great European Countries, to meet the wants of a scattered population which, if massed together,

could find standing room in a field of 120 acres. There are about 800 towns and villages on our 207,000,000 acres of territory*; and each looks for a road and a postal service at least. The strangest thing is that so many have managed to get them. In this part of the world labour is scarce, and must be paid well. It is, therefore, creditable that the Department of Roads and Bridges has been able to perform so well the task of making roads for our erratic population. The main roads of the Colony are—

- I. *The Main Southern Road*, extending from Sydney to Albury, a distance of 380 miles, with its various branches through all the southern districts of the Colony.
- II. *The Main Western Road*, extending from Sydney to Bourke, a distance of 600 miles, with its various branches connecting the centres of the western districts.
- III. *The Main Northern Road*, commencing at Morpeth, on the Hunter River, 100 miles from Sydney, and extending a distance of 400 miles to the Queensland boundary, with branches connecting the towns and villages in the northern districts.

Besides these, there are other principal roads with many branches, in various parts of the Colony. Since 1857, sixteen hundred miles of metalled road have been formed, and 250 miles of mountain passes; and there are now 3,500 miles of roads in various stages of improvement. On these roads there are bridges which, if placed in a line, would cover a length of thirty-five miles. There is a multitude of ferries of various designs. Amongst the bridges there are iron structures with several spans of 100, 110, 120, and 150 feet, constructed in the Colony. The massive piers of the Gundagai Bridge were made of iron smelted from ores of New South Wales. Another valuable undertaking of this department has been the formation of lines of wells and tanks in the remote interior, where the supply of surface water is sometimes uncertain.

Railways.

But our colonists begin to see that country roads are most valuable when subsidiary to lines of railway. Even

* *Greville's Gazetteer and Post Office Directory for 1875-7.*

where the roads are good, carriage is a heavy tax, but if the roads are bad it will cost more and take longer to convey produce from one of our country settlements 200 or 300 miles from a market than to forward it from one end of the world to the other by steam. The fact is, until the interior is traversed by railways, our progress, decided as it has been, will be ridiculously less than it ought to be. Both Government and Opposition admit the urgency of this vital question, and proposals for lines penetrating far to South, West, and North, are now before the Legislative Assembly.

The lines open for traffic on 31 December, 1875, were:—

	Length in miles.
Sydney to Parramatta Junction	13
Darling Harbour Branch	1
Haslem's Creek Branch	$\frac{1}{2}$
<i>Great Southern Railway.</i>	
Parramatta Junction to Gunning	152 $\frac{1}{2}$
<i>Great Western Railway.</i>	
Parramatta Junction to Kelso	130
Branch Line—Blacktown to Richmond	16
<i>Great Northern Railway.</i>	
Newcastle to Murrurundi	120
East Maitland to Morpeth Branch.....	4
	<hr/> 437 miles.*

The construction of these lines has created a debt of £7,245,379, or a little over £16,579 a mile. Some of the extensions have been very costly, owing to lengthy viaducts and tunnels. A part of the western line is noted both for magnificent scenery and a feat of railway construction said to be unsurpassed; the trains crossing a mountain range nearly 4,000 feet high, by means of zig-zags, viaducts, and tunnels. The work accomplished before our railways could be advanced to the present *termini* is shewn by the fact that on 400 miles of line there are one hundred and five bridges, eight viaducts, and

* Recently an extension on the southern line to Bowning, 194 miles from Sydney, has been opened. The extension of the western line into the city of Bathurst has also been completed.

ten tunnels. Upwards of 9,000,000 cubic yards of excavation were necessary, removing a quantity of rock and earth three times the size of the largest pyramid in Egypt.* The rock in this total measured 2,518,897 cubic yards.

The traffic on the lines is growing rapidly. The following is a comparison of the business of 1866 with 1875:—

	1866.	1875.
Passenger Traffic	£ 69,399	£ 174,858
Goods Traffic—		
Wool	4,940	38,160
Coal, coke, and minerals	19,050	69,932
Live stock	936	13,587
General merchandise	57,970	287,028
Carriages, horses, dogs, &c. ..	16,239	31,082
Gross earnings	£ 168,534	£ 614,647

If we compare the receipts of 1869 with 1875 we discover a still more encouraging result—

	1869.	1875.
Miles of line open	318	437
Receipts	£ 264,975	£ 614,647

Dividing receipts by length, we get a traffic of £1,406 a mile in 1875, against a traffic of £833 a mile in 1869, an increase of 69 per cent. in six years! Comparing expenditure with receipts, we find they stood as follows:—

	1866.	1875.
Receipts	£ 168,534	£ 614,647
Working expenses	108,926	296,174
Net earnings	£ 59,608	£ 318,473
Proportion of working expenses	65'	48'18
" " net earnings ..	35'	51'82
	100'	100'†

A difference of 17 per cent. in favour of last year. But if we consult the returns of the Commissioner for Railways again, we find that in 1869 the working expenses were 65·66 of the receipts, so that this growth of 17 per cent. in the net

* Report of Mr. John Rae, A.M., Commissioner for Railways—1869-71, p. 6.

† See very able Report of same Officer—1872-5.

earnings is the result of the last six years. If we inquire the bearing of this improvement on the interest payable for construction, a most satisfactory state of affairs is disclosed. In 1869 the interest recouped was £1 17s. 9d. per cent. on the capital invested; in 1870 it was £1 18s. 1d. per cent.; in 1871 it was £2 11s. 7d. per cent.; in 1872 it rose to £3 7s. 11d. per cent.; in 1873 to £3 12s. 8d. per cent.; and in 1874 to about 4 per cent. The results of the traffic for 1875 shew a net profit of £318,473, or 4·396 per cent. The profits of 1875 exceed by £50,000 the gross receipts of 1869! The increase during the past six years from under two to four and a half per cent. is a fact most encouraging to railway enterprise in this Colony.

The following extensions are now approaching completion:—

Great Southern Railway.

Goulburn to Wagga Wagga*177 miles.

Great Western Railway.

Kelso to Bathurst† 2 „

Bathurst to Orange..... 47½ „

Great Northern Railway.

Murrurundi to Tamworth 62½ „

289½ miles.

When these extensions are completed the lines will be—

South.

Sydney to Wagga Wagga311 miles.

Western.

Sydney to Orange179½ „

Blacktown to Richmond (branch) 16 „

Northern.

Newcastle to Tamworth.....186 „

692½ miles.

This may seem a small total, yet it is greater according to population than that of the railways of any country in Europe,

* Line now open as far as Bowning, 60 miles from Goulburn.

† Now opened.

not excepting Great Britain. But we are only on the threshold of railway progress.

The following will give some idea of the activity which prevails in the department of our able Engineer-in-Chief for Railways, Mr. John Whitton, C.E.

RAILWAY TRIAL SURVEYS COMPLETED.

NORTHERN LINES.

1. *Tamworth to Tenterfield*, 220 miles, via Manilla, Barraba, Bundarra, Inverell, and Wellingrove (the nearest point to Glen Innes, distant 12 miles). Total distance, Newcastle to Tenterfield, 402 miles.

CLARENCE AND RICHMOND RIVERS TO NEW ENGLAND DISTRICT.

1. *Moleville* (the head of the navigable waters of the Clarence River) to *Glen Innes*, via the Mitchell River, 107 miles.
2. *South Grafton* to a junction with the *Moleville* and *Glen Innes* line at the crossing of the Clarence River, 15½ miles.
3. *South Grafton* to *Glen Innes*, 113 miles.
4. *Lawrence* to *Tenterfield*, via Wyon and Tabulam, 118 miles.
A second route is now being surveyed between *Tabulam* and *Tenterfield*.

SOUTHERN LINES.

1. *Wagga Wagga* to *Albury*, via the Hanging Rock, 77½ miles. Total distance, *Sydney* to *Albury*, 386 miles. This line is permanently staked for contract.
2. *Wagga Wagga* to *Deniliquin*, via the Hanging Rock, Urana, and Jerilderie, 142 miles. Total distance, *Sydney* to *Deniliquin*, 450 miles.
3. *Cootamundra* (a point on the Great Southern Railway, 253 miles from Sydney), via Muttama and Colac to *Gundagai*, 33½ miles; and
4. *Cootamundra* via *Jones' Creek* to *Gundagai*, 30½ miles. Total, *Sydney* to *Gundagai*, 283½ miles.

WESTERN LINES.

1. *Orange* to *Dubbo*, via Wellington, 86 miles. Total distance, *Sydney* to *Dubbo*, 278 miles.

COAST LINES.

1. *Sydney*, via Botany and Port Hacking Creek, to *Wollongong*, 49 miles.
2. *Liverpool* to *Wollongong*, 34½ miles. Total, *Sydney* to *Wollongong*, via Liverpool, 63½ miles.
3. *Campbelltown*, via Appin, to *Wollongong*, 40 miles. Total, *Sydney*, via Campbelltown, to *Wollongong*, 68½ miles.

TRIAL SURVEYS NOT YET COMPLETED.

CLARENCE AND RICHMOND RIVERS TO NEW ENGLAND DISTRICT.

1. *Tabulam* to *Tenterfield*; second trial survey.
 2. *Wyon* (a point on the Lawrence and Tabulam trial line) to *Casino*, *Richmond River*.
- Iluka* (Clarence River Heads) to *Woodburn*, *Richmond River*.

NORTHERN LINES.

1. *Tamworth* to *Armidale*: thence probably to *Glen Innes*.
2. *Werrie's Creek* (a point on the Great Northern Railway, 26 miles south of Tamworth, and 156 miles from Newcastle) through *Breeza*, *Gunnedah*, *Narrabri*, *Wee Waa* to *Walgett*; with probable extension to *Bourke*.

WESTERN LINES.

1. *Dubbo* to *Bourke*, about 350 miles.
2. *Wallerawang* (a point on the Great Western Railway, 104 miles from Sydney) to *Mudgee*, about 72 miles.

ROUTES EXPLORED WITH A VIEW TO SURVEY.

1. *Murrumburrah* (a point on the Great Southern Railway, 232 miles from Sydney), via *Booligal*, on the *Lachlan River*, to *Pooncaira*, on the *Darling*, and thence in a westerly direction to the boundary of South Australia.
2. From a point near *Blayney* on the Great Western Railway, and 167 miles from Sydney, via *Cowra* and *Young*, to join the Great Southern Railway near *Murrumburrah*, 232 miles from Sydney.

All the serious obstacles to the rapid extension of the railway system of the Colony have been overcome. Hence the average cost per mile for the future will be about £7,000, far less than half of that for the lines completed. The rails are laid on a uniform gauge of 4 feet 8½ inches. In a speech made at the opening of the Gunning extension, the Engineer-in-Chief stated that 10,000 or 15,000 men would have to be imported to meet the demands of his department; and the Secretary for Public Works assured a deputation from the Iron Trades that rolling stock of the value of £500,000 will be needed during the next five years. There is good reason to hope, therefore, that we are on the eve of a grand extension of our railways. In the absence of rivers of magnitude running to the seaboard, railways are a supreme necessity in New South Wales.

Without them, vast resources are as much beyond our reach as if they did not exist ; whilst each new line would prove an ever widening channel of benefit to all classes of the population.

Since the foregoing paragraph was written the following important extensions have been submitted to the Legislative Assembly. Those marked with an asterisk have already been agreed to, and the rest will probably also be approved :—

WEST.

* Orange to Wellington	56 miles.
* Wellington to Dubbo	30 "
Wallerawang to Mudgee	85 "

SOUTH.

* From a point on the Great Southern Line near June,	
to Narrandera, on the Murrumbidgee River ...	64 "
Wagga Wagga to Albury	77½ "
From near the junction of the Lachlan and Mur-	
rumbidgee Rivers to Pooncaira on the Darling	
River.....	110 "

NORTH.

* Tamworth to Armidale	75 "
* Were's Creek, on Great Northern Line, to Gunnedah	40 "
From Iluka to Woodburn, connecting the Richmond	
and Clarence Rivers	24 "

Total 561½ miles.

The Western extensions will traverse fine agricultural areas, and reach the capital of the North-Western pastoral territory. Of the Southern extensions, that to Albury will connect with the line from Melbourne ; and those to Narrandera and Pooncaira will penetrate extensive pastoral districts. Of the Northern extensions, those to Armidale and Gunnedah will reach agricultural and pastoral districts ; whilst that which will enable the trade of the Richmond River settlers to escape from a shallow bar entrance to the deeper waters of the Clarence, will give an impetus to the development of two of the most flourishing agricultural districts of the Colony.

Our Harbour and River improvements are valuable and extensive. In the port of Sydney there are three large Government wharfs, two of which are of recent construction. The Circular Quay, the most important of the three, is about to be reconstructed upon an improved plan, whether of iron, stone, or wood is just now a subject of warm discussion. The form the Quay will probably take is the *echelon*, and it will provide separate berths for the largest vessels. Opposite each berth there will be a building for the protection of cargo. The eastern channel at the entrance of the port is the scene of important operations. Already a further depth of 8 feet has been obtained. Vessels drawing 27 feet of water can now enter the Heads at dead low water in perfect safety.* There is a Government dry dock, 445 feet long, in which H. M. S. "Galatea," the French iron-clad "Atalante," and the s.s. "Whampoa," 3,500 tons, have been cleaned. At Newcastle, the chief coal port of the Colony, the entrance to the harbour has been deepened; and where, fifteen years ago, there was a muddy lagoon with a rock bottom at 8 feet, there is now a substantial wharf, at which vessels drawing 21 feet can be loaded. A new wharf is being constructed at Bullock Island, to be about a mile and a half in length, on which powerful hydraulic cranes will be erected as the coal trade requires. On completion of the wet dock and coal basin at this place there will be 5 miles of wharf accommodation, where the largest ships can be moored. At Kiama and Wollongong, on the southern coast, extensive basins have been excavated out of solid rock, and breakwaters provided. In the principal rivers the entrances have been improved. At the Clarence a costly breakwater is being constructed. The Engineer-in-Chief for Harbours and Rivers, Mr. E. O. Moriarty, C.E., has eight powerful dredges constantly at work, and two more are being built. Snagging operations on the Darling River

* The largest iron-clad afloat can enter at half-tide. Upwards of 500,000 tons of bottom have been removed.

and the Murrumbidgee, hundreds of miles inland, have been carried on at favourable opportunities. This important branch of the Public Service, like the Departments of Lands, Survey, Railways, Roads, and Bridges, was never so enterprising as at the present period.

Telegraphs.

Our Telegraphs have been rapidly extended. There are 8,000 miles of wire, and 137 stations. Comparing these figures with those of the most extensive telegraph system in the world, that of the United States, with their 75,000 miles of wire, it will be found that according to population our wires are six times the length of the American telegraphs. According to area, the United States have one mile of wire for every 36 square miles, New South Wales one mile of wire for every 40 square miles. We merely state these facts to shew that the people of the Colony are not insensible of the value of this agent of progress. The Sydney Office has been the first in Australia to introduce the automatic instruments of the late Professor Wheatstone. The following is the growth of this department during the past ten years:—

	Miles of Wire.	Stations.	Messages.
1866.....	3,346	63	143,523
1875.....	8,012	137	719,745

Thus 1875 shews an increase over 1866 of 140 per cent. in miles of wire, 117 per cent. in stations, and no less than 400 per cent. in messages. Lines now in progress will add 1,200 miles of wire. For one shilling a message of ten words can be sent to any station in the Colony, and for two shillings to any part of the continent. Thanks to the enterprise of South Australia there is a line 1,800 miles long, from Adelaide to Port Darwin, which, connecting with the ocean cable, unites every Australian town with the rest of the world.

Post Offices.

Our Post Office services are equally efficient. There are now no less than 761 post offices in the Colony, and 17,670 miles of postal lines. The distance over which

the mails of 1875 were carried was 3,800,000 miles. The number of letters which passed through the post offices during the same period was 13,717,900; of newspapers, 6,262,600; of packets, 357,000. The following is the comparison of 1875 with 1866 :—

	Post Offices.	Letters.	Newspapers.	Packets.
1866	455	6,678,371	4,513,185	249,939
1875	752	13,717,900	6,262,600	357,000

An increase during the ten years of 65 per cent. in post offices, 105 per cent. in letters, 39 per cent. in newspapers, and 43 per cent. in packets. The spread of journalism in the towns of the interior accounts for the moderate proportion of the progress of the postal traffic in newspapers. By a wise liberality newspapers are transmitted free. The postage upon inland letters is two-pence per half-ounce, and for the same charge letters can be sent to any part of Australasia. Three lines of ocean steamers, one *viâ* San Francisco, one *viâ* Torres Straits, and one *viâ* Suez, give us three inward and three outward foreign mails every month.

In connexion with each post office there is a Money Order office, corresponding with all similar offices in the Colonies and the United Kingdom. Since 1864 the number of orders issued in New South Wales has increased from 21,905 to 100,000 a year in number, and in value from £105,680 to £419,622. Four years ago a system of Government Savings' Banks was added; interest at 4 per cent. on deposits up to £200 being allowed. The balances at credit of depositors already amount to over £354,000, at the credit of 10,799 accounts. This is exclusive of the older institution, known as the Savings' Bank of New South Wales, which on 31 December, 1875, held £1,295,000, in the names of 30,158 depositors; paying 5 per cent. interest up to £100 in one name. The total amount held by the Savings' Banks of the Colony in 1865 was only £744,874.

Public
finances.

Having glanced at the progress of those branches of administration on which the public welfare and convenience chiefly depend, the public finances now invite notice. The following figures are more forcible than words; they shew the REVENUE PROPER of the respective years:—

1835	£274,591
1845	366,687
1855	800,989
1865	1,899,468
1875	4,126,303

The growth of the Revenue during the six years from 1870 was:—

1870.....	£2,102,697	6	2
1871.....	2,238,900	9	10
1872.....	2,812,011	10	8
1873.....	3,330,913	9	3
1874.....	3,514,314	1	6
1875.....	4,126,303	12	0

The year 1875, therefore, shews an increase of £600,000 over 1874, £800,000 over 1873, £1,300,000 over 1872, £1,900,000 over 1871, and is almost double the whole Revenue of 1870! At the close of 1874 there was a clear surplus of £850,000 in the hands of the Colonial Treasurer. The surplus at the end of 1875 is estimated at £1,424,045* far more than half a year's Revenue a short time ago! This result is notwithstanding largely increased expenditure for Public Works, the extinction of a deficiency debt of £800,000, and the reduction of Customs' taxation by a sum of £200,000 a year. We quite admit that an overflowing exchequer is rather a source of injury than a subject for rejoicing, if brought about by oppressive or impolitic taxation. But the people of New South Wales are less burdened with taxation than perhaps any other in the world. The only imposts which the mass of consumers can be said to be compelled to bear are the tea and sugar duties. The produce

* *Financial Statement of Hon. John Robertson, 8th December, 1875.* The cash balance at the credit of the Consolidated Revenue Fund on 30 June, 1876, was £2,342,787!

of these taxes is £106,000 a year. Consequently, compulsory taxation in the case of the ordinary consumer amounts in the course of a year to about 4s. per head, payable in the smallest fractions. The lion's share of the increase in the public Revenue is derived from the sale and occupation of Crown Lands. Our fiscal prosperity is, therefore, based on the best foundation, the settlement and improvement of the public estate. The following are the chief heads of the Revenue for 1875 :—

Indirect Taxation—

Customs	£974,432	0	1
Duty on refined sugar and molasses	31,266	13	4
Duty on spirits distilled in the Colony	8,572	18	3
	<u>1,014,271</u>	11	8

Direct Taxation—

Stamp duties (under expired Act) ..	4,725	19	11
Duty on gold	14,195	11	2
Licenses	88,808	10	4
	<u>107,730</u>	1	5

Sale and Occupation of Crown Lands	2,020,681	8	11
--	-----------	---	----

Receipts for services rendered—

Railway receipts	598,663	12	1
Telegraph receipts	49,238	2	0
Postage	110,580	5	4
Commission on Money Orders ..	4,189	17	6
Mint charges	13,565	11	11
Fees for escort and conveyance of Gold	3,961	17	4
Pilotage and Harbour and Light Rates, &c.	32,114	15	4
Registration of Brands	1,504	3	6
Contributions under the Sheep Disease Prevention Act of 1866	12,549	19	10
Fees of office	32,128	1	9
	<u>858,496</u>	6	7

Miscellaneous Receipts—

Rents, other than rents of land ..	33,739	12	10
Fines and Forfeitures	8,172	10	10
Interest on Bank Deposits	38,268	14	3
Other items	44,943	5	6
	<u>125,124</u>	3	5

Total Revenue of 1875	£4,126,303	12	0
-------------------------------	------------	----	---

The principal items of expenditure during the same year were :—

Civil List charges	£48,695	3	2
Executive and Legislative Departments ..	19,157	14	11
Colonial Secretary's Department	4,275	17	2
Volunteer and Military Forces	32,948	2	2
Police	155,280	12	6
Prisons	57,590	2	1
Public Instruction and Educational Establish- ments	180,148	9	4
Medical Officers and Lunatic Asylums ..	49,665	16	3
Charitable and Benevolent Institutions ..	51,490	0	2
Department of Justice and Public Instruction	3,156	10	7
Administration of Justice	112,573	0	3
Treasury	11,999	1	4
Customs	38,286	0	10
Government Printing Department	27,197	1	3
Stores and Stationery	73,463	3	7
Marine Board	35,461	11	0
Administration of the Public Lands, &c. ..	273,166	16	5
Department of Mines	20,376	2	6
Department of Public Works	5,021	6	0
Railways	313,874	15	10
Public Works	132,384	18	10
Harbours and Rivers Navigation	121,111	1	11
Roads and Bridges	344,002	1	11
Post Office	199,555	15	10
Electric Telegraphs	66,280	15	1
Interest on Loans	543,178	13	7
Repayment of Loans	75,000	0	0
Drawbacks and Refund of Revenue	94,066	17	4
Charges on Collections	6,998	8	9
Endowment of Municipalities	22,145	7	5
Sydney Branch of the Royal Mint	15,000	0	0
Pensions—36 Vic. No. 29	10,561	15	11
Departments other than those above mentioned	49,638	4	11
Miscellaneous Services	144,580	13	8
Total Expenditure in 1875 ..	£3,338,332	2	6

The Public Debt of New South Wales, outstanding on 31 December, 1875, consists of The Public Debt.

Terminable debentures, falling due in various years from 1875 to 1903	£9,779,600 0 0
Terminable debentures, payable by annual drawings of £20,000.....	937,000 0 0
Interminable debentures	243,030 0 0
Funded Stock—Interminable	513,807 9 11
	<hr/>
	£11,473,437 9 11

The rate of interest on recent loans is 4 per cent., payable half-yearly. Former issues bear 5 per cent. Loans for railways and other public works, authorised but not yet negotiated, bring the debt up to a total of £13,538,170 17s. 9d. But debentures to the amount of £735,800, due in 1876, have been paid off out of surplus revenue.* Therefore, the debt may be set down at £12,800,000.† The actual expenditure on Loan Account to the 31st December, 1875, was—

Railways	£8,129,325 18 6
Telegraphs	351,896 6 3
Immigration	549,210 17 3
Sewerage and Water Supply of Sydney	443,261 14 6
Improving Navigation of Harbours and Rivers	800,989 18 10
Public Works and Buildings	798,329 19 3
Roads and Bridges	337,463 0 3
	<hr/>
	£11,410,477 14 10

Considering that our public debt of £13,000,000 is not much more than three years' revenue; that £7,000,000 of it already return nearly the full interest on the debentures; that £1,000,000 are for Railway extensions not yet opened for traffic; that we have, after providing for the retirement of the £735,000 worth of debentures above alluded to, a cash surplus of about £1,000,000; and an asset of £5,000,000 in the shape of balances due on land purchases, subject to 5 per

* No other debentures will fall due for upwards of twelve years.

† A new Railway Loan of £2,000,000 has just been authorised.

cent. interest until paid ; it would not be easy to point to a Country whose finances are in a sounder position : even if we do not take credit for the amount spent in permanent public works other than railways, and do not look beyond the figures to the grand future which all these means of communication and facilities for government will enable our posterity to realise.

nd policy.

From the earliest times in the history of New South Wales the chief object of policy was to transfer, in some way or other, the public lands to private enterprise. During the long period in which our affairs were controlled by the Imperial Government many schemes to promote that object were tried, all showing an earnest desire for the lasting welfare of the Colony. When in 1855 the territory was handed over to the colonists with the Constitution under which we live, the problems which used to puzzle Secretaries of State were left to be solved by Colonial politicians. Called upon in 1860 to form an Administration, the Hon. JOHN ROBERTSON, the present Premier, chose the position of Minister for Lands, and proceeded to grapple with the difficulties of what soon became known as the "Land Question." It is not for us to do more than refer to the arduous struggles through which Mr. Robertson carried his measures, known as the "Crown Lands Alienation Act of 1861," and the "Crown Lands Occupation Act of 1861."

The chief provisions of the Alienation Act are :

1. Free selection, by any one person, of any area from 40 up to 320 acres, at £1 per acre, 5s. payable on application to select, and balance any time the selector pleases after three years from date of deposit ; the balance being subject to interest at 5 per cent. from expiration of the three years.
2. Residence on free selection for three years, and improvements at the rate of £1 per acre to be made.

3. Conditional purchase of mineral lands, (other than gold) to be improved at the rate of £2 per acre. Price £2 an acre, 10s. payable on application to select, and balance after improvements, or if unpaid, subject to 5 per cent. interest.
4. Forfeited free selections to be open for sale at auction.
5. All other lands to be offered for sale at auction, in lots not exceeding 320 acres.
6. Country lots offered at auction and not sold, to be open to selection without competition at upset price.
7. The upset price of all lands to be: town lots £8, suburban lots £2, country lots £1 an acre.

The main features of the Occupation Act are :

1. The division of the territory into first class settled, second class settled, and unsettled districts.
2. Annual leases in the first class, renewable at £2 a year for every 640 acres. In the second class and unsettled districts, runs offered under five years' leases.
3. Runs to contain an area of 25 square miles, or such area as will maintain 4,000 sheep or 800 head of cattle.
4. Runs never leased open to tender at uniform charge of £10 for rent and £20 for assessment per block; the lease to extend from year to year until the land is appraised, and one charge fixed, whereupon a five years' lease is issued.
5. Forfeited or abandoned runs to be put up at auction at upset rent and lease sold to highest bidder.
6. Owners of purchased land allowed to lease adjoining land to the extent of three times their freehold, at £2 a section of 640 acres, *per annum*.

7. Yearly leases of land not otherwise subject to lease, may be offered at auction at upset price of £1 for every 640 acres for first year ; and may be renewed from year to year at £2 ; if not bid for may be selected on same terms.
8. Mineral lands, gold excepted, can be selected at a yearly rent of 5s. an acre, on leases of fourteen years, with option of renewal for same period ; coal lands in lots not less than 40 nor more than 320 acres ; other mineral lands in lots from 20 to 80 acres.

Under the Imperial Regulations of March, 1843, which the laws of 1861 superseded, the price of country lots was £1 an acre payable in full within one month ; and no lands could be alienated beyond certain boundaries, or before survey, or otherwise than at a land sale, except lots previously offered at auction. The two principles which distinguish the existing policy are, free selection before survey over all unreserved lands, and the deferred payment of three-fourths of the purchase money, subject to a rate of interest. A discussion of the merits of these provisions is foreign to our purpose, but not the observation that so far from producing the disastrous effects upon the squatting tenants of the Crown which were predicted, they have not prevented the growth of the pastoral interest at a great rate, whilst securing to a most satisfactory degree, all things considered, that which should be the great object of all Land Laws, the occupation of our waste lands by those whose best capital is the labour of themselves and their families. Some may think the settlement brought about too scattered, and that it would have been better to restrict enterprise to defined areas, but they may come to see that the germs of industry which have taken root so widely over the vast expanse of our territory will shed the seeds of progress all the more quickly from their diffusion. In this, as in most other things, the interests of individuals are safest in their own hands. Anglo-Saxon energy and

intelligence do not thrive best in leading-strings; they are oftener thrown off the true scent than put on the right track by "paternal" government.

Recently the Land Laws have been amended in some important particulars. The term "person" in the original Act was made so elastic by judicial interpretations that selections were taken up in the names of children, some of them in arms. To set this right, and to discourage "dummying," that is, selection by agents for the benefit of employers, were the main objects of the new measure. It has been enacted that "vicarious selection" shall be accounted a misdemeanor, punishable by imprisonment with hard labour for any term not longer than two years; and that no conditional purchase shall be made by any person below sixteen years of age. The maximum area which one individual can select has, however, been increased from 320 to 640 acres, and so soon as conditions of residence and improvements are fulfilled, further areas of 640 acres can always be selected; and adjoining land to the extent of three times the area of his purchase or purchases can be taken up by the free selector under pre-emptive lease, at an annual rental of £2 for each section of 640 acres. We should not forget another alteration in the law. It is provided that in future an annual payment of one shilling instead of nine-pence an acre shall be made, which is to cover interest on balance due and at the same time gradually extinguish the debt. After deposit and improvements, a selector can occupy 2,560 acres on the following terms:—

	£	s.	d.
Annual interest and instalment of balance due on 640 acres	32	0	0
Rent of 1,920 acres	6	0	0
Total annual payment	£ 38	0	0

Or in the case of the minimum area :

Annual interest and instalment on 40 acres	2	0	0
Rent of 120 acres	1	0	0
	£ 3	0	0

The selector, in both cases, gradually acquiring the freehold of his selection. In point of fact it is his freehold from the first, subject of course to the legal payments.

The following table shews at a glance the progress of free selection in New South Wales* :—

Year.	Number of Selections.	Area.		
		a.	r.	p.
1862	4,493	357,280	2	21
1863	3,558	259,369	3	35
1864	2,350	165,616	3	0
1865	2,166	151,450	0	0
1866	4,239	358,652	0	0
1867	2,995	232,176	0	0
1868	3,194	239,516	2	0
1869	4,999	397,328	2	26
1870	4,471	329,318	1	2
1871	4,751	358,682	2	8
1872	8,281	749,586	3	0
1873	13,417	1,391,719	0	0
1874	14,510	1,586,282	0	0
Total		73,424	6,576,979	0 12

The amount of deposits received, less refunds, was £1,530,977; balances, £243,000; and interest, £308,000. The estimated amount of all the balances due, or to fall due, on these purchases, at 31 December, 1874, was £4,349,598. It will be noticed that the area taken up during 1873 and 1874 *exceeds that of the ten years from 1862 to 1871*. The area taken up in 1875 exceeds that of any previous year, being 1,756,000 acres, equal to all the selections made in the seven years from 1862 to 1868 !

The sale of Crown Lands otherwise is by auction, and land offered at a sale, but not sold, can be selected without competition, at the upset price of £1 an acre. The increase in conditional purchases is even exceeded by the demand for land to be put up at auction. Recently the Minister for Lands stated that there were applications for upwards of 1,500,000

* *Statistical Register for 1874*, p. 254.

acres which could not be looked at owing to the overwhelming pressure upon his department. A leading land agent in Sydney assured us, a short time ago, that there were applications in his possession for 800,000 acres. The increase in the actual alienation of land otherwise than by free selection is as follows* :—

Year.	a.	r.	p.	£	Price.	s.	d.
1865	101,350	1	22½	135,521	4	2	
1866	109,177	1	17½	127,609	0	0½	
1867	119,044	2	29½	138,843	1	8	
1868	149,945	1	13½	160,978	9	11	
1869	164,890	1	2½	182,630	17	8	
1870	94,373	2	14½	112,814	18	11	
1871	88,637	2	10½	99,959	0	0	
1872	166,833	3	1½	177,062	0	6	
1873	389,200	0	37½	409,337	12	5	
1874	702,758	0	0	735,766	12	0	
Totals....	2,086,211	0	28½	£ 2,280,522	17	3½	

It will be seen that the totals for 1873 and 1874 *exceed the area sold during the previous eight years*. The area disposed of in this way during 1875 was about 1,100,000 acres, the receipts being £1,186,872 10s. 10d., or more than the total of the eight years from 1865 to 1872.

If we view the combined result of these figures we find that the area converted from waste lands into private property during 1873 and 1874, 4,069,959 acres, was within 300,000 acres of all the land sold and granted from 1825 to 1865, a period of forty-one years†. The land disposed of by free grants and every other form of alienation from the foundation of the Colony in 1788 down to the close of 1874 was about 16,000,000 acres. The area disposed of by auction and conditional sale at £1 per acre and upwards from 1871 to 1875 was over 8,200,000 acres. Consequently, in the last *five* years, more land has passed into private hands than in the previous eighty-three years! Lest the distant reader should imagine that our waste lands will soon be occupied, we may

* *Statistical Register for 1874*, p. 254.

† According to the "Statistical View of New South Wales," prefixed to the Register for 1872, the area sold from 1825 to 1865 was 4,367,338 acres.

remark that, even at the rate of the last decade, it would take about one hundred and eighty years to dispose of the area still unsold. As an illustration of the benefit of the transfer of land from the State to people who will improve it, we may mention that the extent of land fenced increased from less than 2,000,000 acres in 1865 to over 6,000,000 acres in 1874; that is to say, the ten years shew an increase of 200 per cent. on the previous seventy-seven years!

Pastoral progress and resources.*

The present mainstay of Australian prosperity is live stock. This is conspicuously true of New South Wales, from whose flocks and herds most of the other Colonies made their beginnings. The British Government appears to have discerned from the first the prospects of stock-breeding in its new acquisition. Besides importations from home, frequent though small drafts were made from the Cape of Good Hope and Bengal. In 1797 a few merino sheep reached the Colony from the Cape. In 1803 Mr. JOHN MACARTHUR, a retired military officer, made a voyage to England, and exhibited to the London brokers samples of Australian fleece which rivalled the finest European staples. Through the influence of the brokers a few merinos were presented to him from the flocks of George III., and he was encouraged with a grant of 10,000 acres, which now form the Camden Estate. Mr. Macarthur was soon able to demonstrate that our soil and climate "make bad fleeces good, and good better." Within a short time he won two gold medals in London for wool "equal to the finest Saxony." Others speedily entered into sheep-farming, but the name of MACARTHUR will ever be honoured as that of the father of pastoral enterprise in Australia. In 1813 three adventurous gentlemen, Messrs. Wentworth,† Lawson, and Blaxland, crossed a wild range of

* The Chief Inspector of Stock, Mr. Alexander Bruce, has favoured us with a valuable paper on the "Pastures and Stock of New South Wales," which we have great pleasure in presenting to our readers in the Appendix.

† Mr. W. C. WENTWORTH was then a very young man. He afterwards became a distinguished patriot, orator, and statesman, and the author of the first Australian Constitution.

mountains about 88 miles from Sydney, which had become an irksome barrier. When they reached the other side the party discovered the margin of those vast plains over which our flocks and herds are now spreading. By the year 1828 the live stock of the Colony had become—

Horses	12,479
Cattle	262,868
Sheep	536,391
Pigs.....	40,000

In 1835 the number of runs, as the squattages are called, was 715, on which a rental of £7,000 was paid, and they were classified as follows :—

Pastoral Districts.	Number of Runs.	Annual Rent.
Bligh	37	£ 370
Lachlan	82	810
Port Macquarie	147	1,440
Liverpool Plains	51	480
Monaro	169	1,665
Murrumbidgee	113	1,115
New England	62	585
Wellington	54	535
	<u>715</u>	<u>£7,000</u>

The following shews the number of runs in 1874, in the thirteen pastoral districts into which the Colony is now divided, and the rent payable into the Treasury :—

Pastoral Districts.	Number of Runs.	Annual Rent.
		£ s. d.
Albert	594	14,317 14 4
Bligh	385	12,876 10 6
The Clarence	100	4,598 0 0
The Darling	326	13,960 10 0
The Gwydir	164	10,671 0 0
The Lachlan	622	30,379 4 0
Liverpool Plains	267	13,372 5 0
Macleay	24	1,419 0 0
Monaro	229	4,567 15 0
Murrumbidgee	382	37,914 10 0
New England	171	11,617 12 0
Warrego	479	13,285 14 10
Wellington.....	423	14,397 18 0
	<u>*4,166</u>	<u>£183,377 13 8</u>

* The average area of these runs is about 69 square miles, and the average rent less than one farthing per acre per annum.

The stock depastured in 1835 was as follows :—

District.	Horses.	Cattle.	Sheep.
Bligh	214	24,064	118,841
Lachlan	1,027	37,920	111,754
Port Macquarie	100	5,883	11,642
Liverpool Plains	1,045	102,738	230,102
Monaro	2,133	78,473	230,130
Murrumbidgee	1,517	62,848	180,634
New England	262	13,830	201,926
Wellington	436	26,370	119,441
Total	6,734	352,126	1,204,470

According to the Returns the live stock at 31 March, 1875, was :—

Pastoral District.	Horses.	Cattle.	Sheep.
Albert	2,057	89,985	895,417
Bligh	12,480	144,861	1,412,233
The Clarence	12,340	205,972	1,514
The Darling	3,070	38,998	1,229,531
The Gwydir	9,471	232,482	893,454
The Lachlan	27,598	229,337	4,290,643
Liverpool Plains	21,282	208,470	2,146,557
Macleay	2,181	12,591	1,803
Monaro	16,451	160,044	736,502
Murrumbidgee	30,100	190,740	5,068,865
New England	20,414	237,669	1,101,003
Warrego	4,678	122,036	852,330
Wellington	10,767	169,759	1,427,197
	172,889	2,042,944	20,057,049
Old Counties ..	173,802	813,755	2,815,833
Grand totals	346,691	2,856,699	22,872,882

It must not be forgotten that the striking increases shewn in the above figures are notwithstanding the loss of the Victorian territory in 1851, and Queensland in 1859. If we compare the live stock of 1867 with 1876, we get the following results :—

	1867.	1876.
Horses	278,437	357,696
Cattle	1,771,809	3,134,086
Sheep	11,562,155	24,382,536
Total	13,612,401	27,874,318

Therefore, since 1867 the increase in horses has been 28 per cent., in cattle 77 per cent., and in sheep no less than 111 per cent. But for the ravages of *pleuro-pneumonia* some years ago, and that sheep-breeding paid much better at the time, the cattle returns would probably shew a total of at least 4,000,000 head. The recovery from 1867 has been continuous, the increase during the past seven years having been 65 per cent. If we look at the expansion of the area under lease to the pastoral tenants of the Crown we get an even better idea of the growth of the squatting interest. The following were the entire areas leased for grazing purposes at the periods given :—

	Acres.
1848	41,732,000
1860	49,068,941
1870	128,225,920
1874	183,107,200

Thus, the area occupied down to the year 1848 was increased during the twelve years ended in 1860 by 7,336,941 acres, or 18 per cent.; that of 1860 during the ten years to 1870 by 79,156,979 acres, or 160 per cent.; and that of 1870 by 54,881,280 acres, or 43 per cent. *during the last five years.** These facts disclose a growth of enterprise as remarkable as it was sudden. It needed from 1788 to 1848, sixty years, to occupy 42,000,000 acres. From 1848 to 1860 only added 7,300,000 acres; whilst from 1861 to 1874, 134,000,000 acres were taken up, an area 7,000 square miles larger than England and Wales, Scotland, Ireland, Belgium, the Netherlands, Denmark, Switzerland, and Greece combined.†

* *Statistical Register for 1874*, p. 258.

† The area of these countries is—

	Square miles.
England and Wales	58,320
Scotland	30,685
Ireland	31,874
Belgium	11,412
The Netherlands	20,527
Denmark	14,553
Switzerland	15,233
Greece	19,941

202,545

202,545 x 640 = 129,628,800 acres.

Notable as this expansion of grazing area is, it is scarcely more so than the change which judicious outlay has effected in many districts. Thirty, nay even fifteen years ago, the stations were little better than wild sheep walks, with a few rude huts as "improvements." Now, some are adorned with handsome mansions, and most with comfortable homes, surrounded by gardens and orchards. Dams, wells, wool-sheds, wool-presses, and various mechanical powers have been added, and many thousands of miles of fencing erected.

Not less conspicuous is the improvement begun in the quality of the herds of the Colony. So far as sheep are concerned we could scarcely get better blood, although there is yet room for a better classification of breeds according to climate and soil, and for a more careful preparation of the fleeces for the market. But our cattle are susceptible of great improvement. This is felt by cattle-owners, and efforts are being made to buy the best blood. The owners of pure strains never had to meet so strong a demand. The shows of the Agricultural Society of New South Wales, and of district Societies of a similar nature, always attract an extensive display. The show in Sydney is followed by a series of sales. As much as 1,100 guineas have been paid for a heifer, and £1,000 for a bull; high prices, it is true, but they serve to shew the value set upon good blood by buyers as well as sellers. At the show of 1875* there were 284 competing animals for the cattle prizes, of which 179 were Durhams, 52 Herefords, and 43 Devons. There were besides, 103 Durham, 15 Hereford, and 13 Devon bulls exhibited for sale. The verdict was that the quality could only be surpassed at the best of English shows. The horse stock of the Colony varies from the very best to the very worst. The bulk is of inferior quality. There is nothing in the

* The Exhibition of April, 1876, attracted 428 entries of pedigree stock. The prize ox, fed on grass, turned the scale at 2,520 pounds, | live weight. There were 74,930 persons at the Show, from all parts of the Colony.

climate to account for this. We are glad to learn that horse-breeders are awakening to the necessity for improvement.*

It would not be easy to perceive a limit to our resources for pastoral enterprise. There is no part of the Colony where sheep or cattle will not thrive. Without very great attempts at improvement there is room for millions more of live stock; but when science and capital combine in our sheep and cattle farming, under a more secure tenure than a five years' lease, the wealth annually reaped from the pastures of New South Wales will be very great.

Those who have observed in English circulars that "Port Phillip" exports the most Colonial wool will be surprised by the subjoined figures, shewing the relative rank of the Australian provinces as owners of stock. The explanation is this: a great deal of the wool of New South Wales is sent to Victoria and South Australia for shipment. In one division of our territory, Riverina, adjoining the river Murray, there are as many as the whole number of sheep in Victoria; about 47,000,000 pounds weight of wool crossing the border annually! In 1860 the figures for the several Colonies were—

	Sheep.	Cattle.	Horses.
New South Wales.....	6,119,163	2,408,586	251,497
Victoria	5,794,127	683,534	69,288
Queensland	3,449,350	432,890	23,504
South Australia	2,824,811	278,265	49,399
Tasmania	1,700,930	83,366	21,034
Totals	19,888,381	3,886,641	414,722

The following are the figures for 1874 (31 March, 1875):—

	Sheep.	Cattle.	Horses.
New South Wales	22,872,882	2,856,699	346,691
Victoria	11,323,080	883,763	180,342
Queensland	7,606,000	1,650,000	110,000
South Australia	6,120,211	185,342	93,122
Tasmania	1,714,168	110,450	23,208
Totals	49,636,341	5,686,254	753,363

* Our race-horses have long been the best in Australia. Some of their performances are celebrated. "The Barb" won a three-mile Champion Race at Melbourne in 5 min. 38secs.,

"in a trot," and finished a brilliant career on the turf by easily winning, as a young 5-year-old, a handicap race in a field of 23 horses, carrying 10 st. 8 lbs., 2 miles, in 3 min. 40 sec.

The Mother Colony possesses nearly as many sheep as all the others together ; she has more cattle than the other four Colonies ; and has more horses than Victoria, Queensland, and Tasmania combined. The increase in our sheep is particularly striking. The year 1874 shews an increase of 16,700,000 over 1860, and 8,000,000 over 1869.

Naturally there are predictions that a period of depression must follow. But we can await a change for the worse with less apprehension than at any former time. A long gradation of advances leaves a wide margin for receding prices before they can find a very low level. The squatters are also in a stronger position to encounter difficulties. Improved classification of their fleeces has done much, and might easily do a great deal more, to save them from the effects of a fall in prices. The Australian markets for beef and mutton are larger. During some years past a new industry has established itself, which will ensure an outlet for surplus stock, if they should decline in value. We allude to the export trade in preserved meat. There are now 23 Meat-preserving Companies in the Colony, and they manage to struggle on in spite of the comparatively high price of stock. Large European contracts have been offered to them, which in the present state of the market they dare not take. If dull times come this trade will spring into vigorous life. Sure markets will always await its operations ; and better prices better prepared shipments.

We cannot avoid reference to an enterprise which we have regarded for a long time with interest. A few months ago a large party of colonists responded to an invitation to inspect a building bordering upon Sydney Harbour, and connected by rail with an establishment on the other side of the Blue Mountains, to which the party proceeded. Few of those who viewed the elaborate appliances could have an idea of the arduous thought of the inventor, Mr. E. D.

NICOLLE, or the large-hearted generosity and patience of the capitalist, Mr. T. S. MORT, the result of whose labour and anxiety they were soon to test. At the luncheon given on the occasion, beef, mutton, and game, which had been kept in a freezing chamber for periods from one to two years, were placed on the tables. They proved of first-rate quality, flavour, and colour. We venture to believe that Messrs. MORT AND NICOLLE's process of freezing meat for consumption in Europe, for which these costly works were erected, is an invention which will enrich the Colony, and contribute more to the prosperity of young and the wants of old communities than any discovery of late years. That it may be entirely successful is the unanimous wish of the people of New South Wales, not more for the public benefits it will confer, great as they are, than on account of the general admiration felt for Mr. Mort, whose many ventures as a pioneer in the leading industries of Australia reveal a combination of private enterprise and patriotic spirit rarely met with, and more to be honoured in a new country than the happiest efforts of the orator, the poet, or the politician.

We gather from the Statistics of 1875 that the export of the products of pastoral industry in New South Wales during the year reached a value of over £7,200,000. The wool shipped, the produce of the Colony, exceeded 87,500,000 lbs. valued at £5,650,000 sterling; live stock, sold principally in the Victorian market, amounted to £1,200,000; tallow, skins, and leather to £306,000; and beef and mutton, chiefly preserved, to £70,000. If we compare the export of 1865 with that of 1875, the result is as follows:—

	1865.	1875.
Wool	2,283,559	5,651,643
Live stock	784,240	1,191,298
Tallow, skins, leather, &c.	218,727	306,210
Preserved meat	35,659	73,712
	<u>£ 3,322,185</u>	<u>£ 7,222,863</u>

The export of wool has risen from 29,858,791 to 87,534,280 pounds weight ! The total quantity and value of wool shipped from our ports up to the present time may be stated thus :—

	Pounds weight.	Declared value.
According to returns.....	977,780,394	£65,784,391
Overland traffic during years not included in returns, say ..	150,000,000	11,429,000
	<u>1,127,780,394</u>	<u>£77,213,391</u>

These brief outlines, but carefully collected facts, of the PASTORAL INTEREST of New South Wales will suggest some idea of the future it will attain when stock farming rises amongst us to the maturity of a scientific system.

Agricultural
resources and
progress.

Pastoral industry is the best beginning from which other developments can proceed, but everybody will allow the shepherd must give way to the farmer. The main test of national promise has always been agricultural capability, and unless New South Wales can pass that test her future will be a dark problem. We ought, therefore, to turn from our flourishing pastoral interests and examine the resources of the country for agriculture. It is worth our while to take a flying trip over the Colony for the purpose. Let us begin on the coast and at our Northern boundaries. We find here a district watered by three rivers—the Tweed, Richmond, and Clarence—with an area approaching 4,000,000 acres, pronounced by authorities to be generally suitable for the cultivation of maize, sugar, the vine, silk, cotton, arrowroot, coffee, tea, and semi-tropical fruits of nearly every kind. Lower down, we fall in with four rivers called the Bellinger, Macleay, Hastings, and Manning. These rivers water an area of 3,000,000 acres, adapted as a rule for maize and sugar. We come next to the Hunter River. On the Lower Hunter, corn and lucerne hay are grown in large quantities. On the Upper Hunter the vine and most cereals thrive. In the county of Cumberland, on the alluvial flats of

the Hawkesbury and Nepean Rivers the principal crops are hay and corn. Once wheat was the chief crop, but in this the metropolitan county grazing has become more profitable. Passing Sydney, we soon reach districts sown with imported grasses, and rich in sedimentary deposits. From the Illawarra district, great in dairy produce, down to the Southern boundary, a length of about 200 miles, the coast may be said to abound in fertile land adapted for dairy farms. The extensive district near Bega, a town 255 miles from Sydney, boasts of a soil and climate which have won for it the title of "the garden of Australia." Thus, the localities destined to supply the great ports of our future with milk, butter, cheese, eggs, ham, and bacon, lamb and veal, are all within easy reach by sea or rail. Beginning our tour northwards through what may be called the middle area, we at once fall in with the most remarkable range of mountains in Australia, perhaps the only one worthy of the name. This range, though taking an erratic course, extends northerly along the whole length of the Colony. It divides, as we have said, the inland waters into an easterly and westerly flow, and culminates 60 to 150 miles from the coast. In the south it gives us the high lands of Monaro, Braidwood, Bungendore, Yass, and Goulburn, with an area of about 15,000,000 acres, in a climate with a temperature resembling that of England. Over this wide surface wheat and all English cereals, fruits, and vegetables will thrive. The range makes a dip northerly, and does not rise again to any great prominence until we reach the Liverpool Range. From thence we are on the table-lands of New England and Tenterfield, about 3,000 feet above the sea, where *the English climate, shorn of its severity, is again met with.* Here there is an area of about 14,000,000 acres, suited to English cereals and fruits. The western slopes of this Great Dividing Range, for a breadth of from 100 to 150 miles, are suitable for wheat and the vine. A very large part

of the territory is splendidly adapted for the vine and the silk industry. The mulberry-tree, in all its varieties, thrives everywhere. Tobacco can be grown in different parts of the Colony. If we compress the foregoing outline into a schedule we find the soil and climate of New South Wales to be suitable for the cultivation of—

Wheat,	Coffee,
All other English cereals,	Tea,
Maize,	Tobacco,
The Vine,	Cotton,
Sugar,	Fruits of the temperate region,
Silk,	Fruits of the semi-tropical region.

We should add that some parts of the Colony favour the growth of the olive, cinchona, indigo, and rice. It is on the strength of broad natural facts, therefore, that we describe New South Wales as possessing agricultural resources of great variety and extent.*

At first sight the comparatively insignificant statistics of agriculture in New South Wales may cause surprise; but there are two circumstances which afford a good apology. The first is the novel fact that, owing to the nearness of the Dividing Range to the seaboard, the large rivers of the Colony, receiving nearly the whole of the interior waters through numberless tributaries, flow inland, and make their way to the other side of the continent. We have no wide streams flowing towards our coast to serve as cheap highways for our products. There is no greater obstacle than this to the progress of agriculture in its first stages in a young country. The railway becomes a good substitute for the river, but until recently our lines did not reach a single agricultural area! In the second place, the gold discovery dealt a heavy blow to so plodding an industry. Nor was it likely that a deluge of gold-seekers would leave a large

* More detailed information in reference to the agricultural capabilities of the different districts will be obtained at pp. 112 to 121.

agricultural deposit. The mountain rainfall is another drawback. If the reader will picture to himself an inland territory as large as Great Britain and France, without rivers to the ocean of any considerable length, and almost without railways, over which a population of two to the square mile is scattered, most of whom have no taste for agriculture, and are too well off in many other ways to be forced to it, he will moderate his surprise at the disclosure that the whole area under cultivation in New South Wales, so well adapted for nearly every kind of growth, does not exceed 465,000 acres.*

No distinction was made in our returns between squatting tenants and other holders of land until 1863. The following is the comparison of 1863 with 1875 :—

Year.	Number of occupiers of land (exclusive of those for pastoral purposes.)	Total extent of holdings.	Land in cultivation.	Extent of holdings enclosed.
1863	19,361	Acres. 7,310,343	Acres. 308,260	Acres. 1,817,218
1875	36,984	13,525,497	451,138	7,771,068

This is remarkable progress considering that we are comparing a period of thirteen years with one of seventy-five years. It is interesting to observe that the free selectors under the popular Act of 1861 already possess 159,963 horses, 1,126,806 head of cattle, and 6,831,685 sheep. It seems evident that "squatters" are giving way to graziers; and that a system of land and stock farming will follow. This order of progress is natural, and in a country like this it is certainly most advantageous. At the same time, making every allowance, agriculture in New South Wales lags too far behind her sister industries.

* It is worthy of remark, however, that this area, according to population, is much larger per head than that under cultivation in Great Britain.

The following is a summary of the crops for the year ending 31 March, 1876:—*

	Acreage.	Produce.
Wheat—grain	133,609½	1,958,640½ bushels
hay	13,364½	15,387½ tons
Maize—grain	117,582½	3,410,517½ bushels
hay	2,308½	(No return)
Barley—grain	4,817	98,576 bushels
hay	1,461½	1,633½ tons
green food	2,113½	(No return)
Oats—grain	18,855½	352,966½ bushels
hay	52,097½	54,237½ tons
green food	2,493½	(No return)
Rye—grain	918½	11,756 bushels
green food	629	(No return)
Millet—grain	149	2,593½ bushels
green food	230½	(No return)
Potatoes	13,805½	41,203½ tons
Tobacco	491½	458,947 lbs.
Sorghum and Imphee—grain ..	23½	59½ tons
green food	987½	(No return)
Arrowroot	40½	46,787 lbs.
Sugar-cane—yielding	3,653½	2,310,860 cwt.
not in yield in 1875	2,800	.....
Sown grasses—hay	10,201½	17,708½ tons.
green food	41,871½	(No return)
Vineyards—for wine	3,162½	831,749 gallons.†
fruit	637½	768 tons.
not productive in 1875	658	
Gardens and orchards	19,407½	
All other	2,766	
Totals	451,138½	5,835,030 bushels 130,998½ tons 2,310,860 cwt. 505,734 lbs. 831,749 gallons

These yields represent what our soil can do with farming generally of the rudest kind, and seldom under the guidance of experienced enterprise, to say nothing of a knowledge of the principles of agricultural chemistry.

Agricultural
settlement.

Our deficiencies in agricultural industry only make the openings for European settlers all the better. Notwithstanding the scant acreage under crop, the supreme difficulty of the industry is *labour*. In the country districts constant complaints are heard of the dearth of hands. It is easy

* *Statistical Register for 1875*, p. 173. This season was peculiarly unfavourable for agriculture.

† Also 2,747 gallons of brandy.

to see that agricultural settlement is the great want of the Colony; and one of the most useful questions to consider although a difficult one to solve is, how best to swell the ranks of husbandry from abroad. Natural resources are prolific, and already we have plenty of ready cash. But we lack the more wonderful resources of human brain and sinew. The small area of cultivation may cause its importance to be ignored, but no one can rise to a conception of its varied possibilities in this Country without the conviction that *agricultural immigration* is the first corollary of *railway extension*. A nation may become great in manufactures and commerce, but the only safe foundations of progress rest in the earth. A young country should rather begin with farmers and ploughmen than clerks and artisans. People the interior with tillers of the soil, and towns and villages, with all their arts, will grow of themselves. There are none, therefore, whom we should welcome to these shores so heartily as men bent upon making homes for themselves and their families on our wide domains, and we feel assured they would never regret the venture. Land can be obtained on easy terms; labour is in great demand; our railways are being extended north, west, and south; taxation is light, living cheap, and life and property safe; whilst men of every race and creed can enjoy amongst us an atmosphere of sober industry, enlightened enterprise, orderly government, and complete toleration, beneath a genial sky and on a virgin soil—a union of advantages rare in human experience.

Wheat is the crop that occupies the largest number of acres. The following figures shew the growth in area:—

	Acrea.
1837	59,975
1845	87,894
1855	86,369
1865	104,568
1875	146,974

The increase of 1865 over the previous period is 21 per cent. ; that of 1875 over 1865, 40 per cent. The yield varies from an average based on the crops of the last ten years of 12½ bushels up to 40 bushels to the acre. The average per acre in New South Wales considerably exceeds that of the great wheat-producer of the Colonies, South Australia. The fine quality of Australian wheat is known, and we claim to produce the best. At the recent Intercolonial Exhibition in Melbourne, Messrs. Watson Brothers, of Young, in one of our Southern, and Messrs. Lewis Brothers, of Tamworth, in one of our Northern, districts, secured the first prizes for wheat, and flour the produce of wheat, grown in New South Wales, over competitors from South Australia, Victoria, and Tasmania. Watson Brothers have taken a first prize on every occasion they have exhibited, and hold three gold medals and four first prizes for flour. The average wholesale price of wheat in Sydney is 5s. to 5s. 3d. per bushel of 60 lbs. Wheat is grown in most of the districts, but the principal are:—

<i>South-west.</i>	<i>North.</i>	<i>West.</i>
Albury.	Armidale.	Bathurst.
Burrowa.	Tamworth.	Carcoar.
Goulburn.		Molong.
Gundagai.		Mudgee.
Oxley.		Orange.
Yass.		
Young.		

Maize.

Maize shows a smaller area but a larger yield than wheat. Last year it covered 118,000 acres, and the produce was 3,410,000 bushels. The average yield of the two last decades exceeds 31 bushels per acre. This crop is mainly cultivated on the coast rivers, the return ranging in some localities up to 80 and 100 bushels an acre. Occasionally a flood rushes down these rivers, and in a few hours destroys the labours of months, but the soil is so good that one fine season enables the farmer to recover the losses of two or three bad ones. The fine quality of our corn, which commands

the Colonial market, is illustrated by the manufacture of maizena, known as "Munn's," for which Mr. T. S. Mort's enterprise has obtained a position equal to that of the best American. The average wholesale price of maize is from 3s. 6d. to 4s. per bushel of 60 lbs.

The districts which shew the largest maize crops are:—

<i>South.</i>	<i>North.</i>	<i>West.</i>
Shoalhaven.	Maitland.	Penrith.
Broulee.	Manning River.	Windsor.
	Port Macquarie.	Bathurst.
	Macleay River.	Mudgee.
	Grafton.	
	Richmond River.	

Oats and barley are chiefly cultivated for green food, and Oats and barley.
hay for horses and cattle. The leading districts are—

<i>South-west.</i>	<i>North.</i>	<i>West.</i>
Campbelltown.	Armidale.	Parramatta.
Camden.		Penrith.
Goulburn.		Windsor.
Wagga Wagga.		Bathurst.
Yass.		Mudgee.
Young.		Orange.
Albury.		

Sown grasses will inevitably take a leading rank in the Sown grasses.
returns, when greater intelligence and system are brought to bear on the management of stock. It is pleasing to observe that the area cultivated for green food for cattle has been doubled during the past ten years. A gentleman who recently managed the East Derbyshire cheese manufactory in England, and is now superintending the production of cheese on Mr. Mort's well-known Bodalla Estate, where imported grasses are luxuriant, gives it as his opinion that the milk of the estate is as good as the best English. This is an example of what can be done with Australian soil when men of enlightened enterprise turn their attention to it.

The other crops in their present proportions do not call Sugar.
for prominent notice, until we come down to sugar. The

cultivation of the sugar-cane has made great progress during the past few years. In 1864 there were only 141 acres of cane, of which the product was 240 pounds of sugar. During 1874 the area was 8,540 acres, of which 4,087 acres productive during the year, yielded 15,355,648 pounds of sugar. The chief seat of this industry is the Clarence River, on our Northern coast, where the Colonial Sugar Refining Company have erected mills and expensive machinery. The Company have a new steamer of 489 tons register trading between Sydney and the works. The sugars of New South Wales, having had the advantage of being treated by experienced refiners, speedily gained ground in the market, and there is a good demand for them at prices ranging from £30 to £40 a ton. On the Richmond and Tweed Rivers, to the north of the Clarence, the sugar-cane is rapidly superseding every other growth; and numerous crushing mills are being erected. The quantity of rum distilled from molasses during 1875 was 152,000 gallons.

Wine.

The cultivation of the vine is already a leading industry in the Colony, where wine enough to supply Europe could be produced in single areas, combining the necessary conditions of soil, climate, and aspect. This fact was recognised many years ago. In 1840, Mr. Busby made a voyage to Europe under the auspices of Mr. (now Sir William) Macarthur, and brought out a valuable collection of plants from the Rhine. But the production of wine upon a large scale dates from about ten years ago. This is an industry which requires time to bring it to perfection, for European experience has of course been experiment here. But our wines are already highly esteemed, and go largely into consumption. We are informed by some of the vigneron that it is difficult to cope with the demand, and that they are extending their vineyards as fast as they can. Exhibiting abroad, under many disadvantages, they have yet won high distinction at

the great Exhibitions of the world. On the 3rd December, 1873, Mr. J. T. Fallon read a paper before the Society of Arts, London, on "Australian Vines and Wines." In the discussion that ensued the following remarks were made :—

Mr. P. L. SIMMONDS :—

"This subject had come considerably under his notice during the charge he had had of Colonial products at various Exhibitions, and was one both of Colonial and Imperial importance. It was pretty well known, although not in detail, to the public at large, that Australia was a country flowing with corn, wine, and oil, and produced the finest wheat in the world, and its wines had received high commendation at every Exhibition. At Paris he had put them to very severe tests in competition with the products of other large wine-producing districts, and they carried off many medals, which must have been very satisfactory to the colonists, especially as they had to contend against many difficulties, the wines not being really in first-class condition. Notwithstanding that, the red wine of Wyndham had carried off the silver medal. Again, four bronze medals were given to South Australia, and four to New South Wales, and the wines of the Chairman had also received favourable notice. Besides this official recognition, he himself gave a dinner, at which these wines alone were used ; and although the wines were not in good condition, having been exposed for many months to the sun, still they universally obtained a high opinion, and the Academie Nationale awarded a silver medal on their recommendation. He had already had them at Dublin, London, and other Exhibitions, and there the same character was given to them.

Mr. D. TALLERMAN :—

"He could corroborate what had been mentioned by the last speaker, and having recently visited Vienna, he was able to say that the Australian wines there took a larger per centage of prizes in proportion to the number of exhibits than any other, and that notwithstanding the great amount of deterioration done to the wine by travel and being exposed for months to a climate to which they were not accustomed. So high was their character, in fact, that one of the jurors in the French department asserted most distinctly that they were French wines which had been taken out to Australia and brought back again."

Mr. E. C. BOOTH said :—

"He had had personal experience of Australian vineyards, and did not base his knowledge on photographs, which might easily mislead, as they seemed to have misled Dr. Thudichum. With reference to the diploma of honor awarded to wines at Vienna, he had been there when the award was made. It could not be made to any individual, or to an exhibitor, and it was given to the Acclimatisation Society of Victoria—not because it had made wine, but because by its influence it had conduced more to the

excellence of the wine than any individual or body. Besides that, the wines of Australia obtained prizes to the extent of $32\frac{1}{2}$ per cent. of the whole exhibits at Vienna. He could also corroborate what had been already stated by Mr. Tallerman, that one man turned round and said—'I do not believe this wine ever came from Australia; these are very fine French wines that have been sent abroad and brought back again, and so matured.' That showed the effect they produced, and they were not tried under favourable circumstances, having been exposed for a long time to a broiling sun in the height of summer. Mr. Wilson had referred to the peculiar excellence which characterised the Australian wines, and in this he quite concurred."

The following figures will afford an indication of the progress of this promising industry:—

	Wine produced. Gallons.
1862	85,328
1871	342,674
1875	831,749

The yield has thus been much more than doubled during the past four years. Our production for 1874-5 exceeded that of South Australia by 36,000 gallons, and that of Victoria by over 100,000 gallons. The following is a list of the prizes obtained by the New South Wales wines at the recent Victorian Exhibition, at which there were 270 wine exhibits, 155 from Victoria, 68 from South Australia, and 47 from New South Wales:—

Prizes awarded to Mr. J. T. Fallon, Albury, New South Wales.

RED WINES.

Hermitage, 1869.....	First prize.
Malbec, 1869	First prize.
Shiraz, 1868.....	First prize.

WHITE WINES.

Riesling, 1869.....	First prize.
Aucarot, 1869	First prize.
Tokay, 1868.....	First prize.
Tokay, 1864.....	First prize.
Aucarot, 1872	First prize.

Prizes awarded to E. Greer and Company, Albury, N.S.W.

RED WINES.

Shiraz, 1871.....	First prize.
" 1872.....	First prize.
" "	First prize.
Malbec, 1872	First prize.
Carbinet, 1873.....	First prize.
Burgundy, 1873	Third prize.
Shiraz, 1873.....	First prize.
Carbinet and Malbec, 1873	First prize.

WHITE WINES.

Aucarot, 1871	First prize.
Muscat, 1873	First prize.
Verdeilho, 1873	Third prize.
" "	Fourth prize.

Prizes awarded to Carmichael Brothers, Seaham, N.S.W.

WHITE WINES.

Riesling, 1872	First prize.
Madeira, 1869	First prize.
Riesling, 1869	First prize.

Prizes awarded to Mr. G. Wyndham, Branxton, N.S.W.

RED WINES.

Hermitage and Malbec, 1872	First prize.
Burgundy, 1873	First prize.

WHITE WINES.

Pineau, 1873	Fourth prize.
--------------------	---------------

Prizes awarded to Mr. M. Parnell, West Maitland, N.S.W.

WHITE WINES.

Riesling, 1866	First prize.
Madeira, 1871	Third prize.
Riesling, 1874	Third prize.

Prizes awarded to Mr. Carl Brecht, Denman, N.S.W.

RED WINES.

Hermitage, 1870	Fourth prize.
" 1873	Second prize.

WHITE WINES.

Riesling, 1872	Third prize.
----------------------	--------------

Prizes awarded to Mr. A. Munro, Singleton, N.S.W.

WHITE WINES.

Shiraz, 1872	Second prize.
Pineau, 1874	Third prize.

RED WINES.

Lambrasquat, 1874	Fourth prize.
-------------------------	---------------

Prizes awarded to Mr. W. Wyndham, Bukkulla, Inverell, N.S.W.

RED WINES.

Hermitage, 1872	Second prize.
Malbec, 1872	Second prize.

The 47 exhibits won 23 first prizes, 4 second prizes, 6 third prizes, and 4 fourth prizes; thirty-seven prizes for 47 entries. Nothing could be more honourable to our wine-makers, who have to contend with producers of a high class in the neighbouring Colonies.

The advantages New South Wales contains on so large a scale for the leading rural industries are further revealed in Agriculture by the extent of territory admirably adapted for the production of silk. Every variety of the mulberry finds a congenial habitat, and the silkworm family not only thrives, but has kept free from diseases which make fearful havoc amongst its members in some of the chief seats of the industry. Attempts have been made to establish sericulture in this Colony, but they have been abortive. If we could enlist the eloquence of a Mrs. Bladen Neill, success might soon follow. That the Colony will one day figure as an exporter of raw silk is certain; when, is only a question of time. Natural advantages so obvious cannot lie idle long in this busy age, when so near the march of enterprise. From "New South Wales, the Oldest and Richest of the Australian Colonies," by Mr. Charles Robinson, acting at present as Secretary to our Commission at Philadelphia, we take the following extract from a letter addressed in 1870 to the Colonial Secretary of the day, the late Sir Charles Cowper, by Mr. Charles Brady, who is our best local authority on the subject of this paragraph:—

"My own personal knowledge and experience in the treatment of silkworms in New South Wales and Queensland for several years, justify me in expressing my conviction that this part of Australia, at any rate, is peculiarly well adapted for the production of cocoons. I began the study of the subject in 1862, and have since devoted myself exclusively to this pursuit, in all its relations, particularly to experiments and efforts to take advantage of our brilliant atmosphere, and of various food grown in this climate, to introduce and breed superior races of silkworms, and especially to free them from the dire disease which now for so many years has all but destroyed an industry yielding annually more than thirty millions of pounds sterling to the present

cultivators of Southern Europe. My experiences have been most conclusive and satisfactory, and it is proved that the importance of our proceeding here is not unappreciated in England by persons capable of forming an estimate of their value. I am well aware that the public mind is prepossessed with the idea that the growth of silk in Australia must prove unremunerative on account of the high relative price of labour in the Colonies ; but I have never met with even one person who had investigated the subject, or qualified himself in any way to form an opinion, who held this idea ; in fact, not only is there nothing to prevent silk being raised as cheaply in Australia as in France or Italy, but there is very good reason to believe that, favoured as we are by climate and cheap land, we may be in a position to undersell any Country in Europe."

The fruits of the Colony yield another illustration of the variety of the soil and climate. The following is a list of the fruits that will thrive :—

Apples, over 200 varieties.	Oranges
Pears, „ 100 „	Lemons and Limes
Apricots „ 20 „	Shaddocks
Cherries „ 40 „	Citrons
Nectarines 19 „	Bananas
Peaches „ 45 „	Strawberries
Plums „ 60 „	Chestnuts
Grapes „ 50 „	Walnuts
Mulberries, many „	Jack-fruit
Figs, „ „	Loquats
Medlars	Date Plums
Quinces	Dates
Almonds	Cocoanuts
Nuts	Chinese Raisin
Guavas	„ Longan
Passion Fruit	Pine-apples
Blackberries	Pomegranates
Custard Apple	Rose Apples
Raspberries	Cape Gooseberry
Currants	Olive
Gooseberries	&c., &c.

Next to the grape comes the orange, of which a large quantity is exported to the neighbouring Colonies. Some of the orangeries in the vicinity of Parramatta are remarkable for yield and extent. The supply of fruits to the various markets is abundant and cheap. Fruit which is *lent* in England at high rates can be bought in New South Wales for a few

pence ; whilst the English varieties are also plentiful, coming principally from the southern districts. The preserving of fruit has made rapid advances lately ; and jams and jellies of local manufacture are extensively sold. Mr. E. Squires, of Penrith, preserves peaches, quinces, nectarines, plums, apples, pears, gooseberries, mulberries, cherries, grapes, pine-apples and apricots, in water and hermetically sealed tins ; also most of the kinds in sugar. Oranges are well preserved whole by the latter process. The wholesale price of these fruits is 13s. a dozen of 3 lb. tins. We can speak highly of the way in which the fruits are preserved ; the flavour and freshness being retained. Mr. Squires holds four first prizes and the silver cup of the Agricultural Society. The demand for his fruits is in excess of his present means of supply ; and that should be an encouragement to all engaged in this promising industry.

the timbers of
New South
Wales.

“ No country has been favoured by nature with a greater variety and abundance of trees yielding strong, beautiful, and durable timbers than the Colony of New South Wales.”* Mr. Moore observes that good timber can be obtained in every part of the Colony, some parts of the Monaro, Murrumbidgee, and Murray districts excepted. The banks of the coast rivers are supplied with a luxuriant growth of the best kinds. There are upwards of twenty-seven species of the *Eucalyptus*. The durability of our timbers is proved by the fact that the vessels built in the Colony never seem to grow old. A gentleman for upwards of thirty years a Sydney shipowner, has kindly supplied us with a list of timbers suitable for ship-building purposes, with their uses and probable duration. He instances several vessels which have been sailed from fifteen to thirty years, whose hulls, made of Colonial hardwood, are as sound as ever. The “ Fanny Fisher,” a barque of 300 tons, built at the Manning River

* Paper on the “ Woods of New South Wales,” by Charles Moore, F.L.S., Director of the Botanic Gardens, Sydney, page 1.

thirty years ago, and now in the flour trade, has not had new lower masts since she was launched, and her hull is still perfectly sound. The following is the list :—

Name of Timber.	General use.	Duration.
Ironbark	Ships' keels, sterns, stern posts, lower timbers ...	Over 50 years.
Grey Box.....	Keels, sterns, stern posts, keelsons, clamps, beams, and knees, and planking	Over 50 years.
Spotted Gum	All frame-work, and planking and lining.....	40 years.
Black Butt	Lower masts, planking, and all scantling.....	40 years.
Blue Gum	Planking and scantling top timbers	30 years.
Flooded Gum	All spars and planking	30 years.
Bangally	Planking and timbers	Over 40 years.
Forest Mahogany.....	Upper and lower timbers	40 years.
Swamp Mahogany	Upper and lower timbers	40 years.
Woolly Butt.....	Timbers and planking	Over 40 years.
Tallow Wood	Keels, sterns, stern posts, keelsons, knees, beams, deadwoods and all framework	Over 50 years.
White Apple-tree.....	Planking, and all framework	Over 40 years.
Turpentine	Keels, and all parts under water.	Over 40 years.
Beech (white)	Deck plank, and cabin fittings.....	Over 15 years.
Cedar (should be large well-grown timber).	Top timbers, cabin fittings, boat planks	Over 15 years.
Mountain Pine.....	Deck plank, bulwarks, cabin fittings, boat planks....	Over 15 years.

Upwards of seventy specimens of woods of the Colony were officially tested at the Royal Mint in Sydney, in 1861, at the request of Sir William Denison; and the result shewed that for strength and elasticity "many of the woods were superior to the ash, the oak, and the best woods of Great Britain."*

In a paper on "The Fisheries of New South Wales," a very competent authority† asserts that "the coast of the Colony is situated in a zone of temperature, and endowed with marine and topographical conditions, admirably adapted as a habitat for the many families of edible fishes with which Nature has endowed us. From north to south the coast abounds with spawning as well as feeding grounds. A score of rivers with wide and well protected embouchures, and a thousand inlets and indentations of every size and form, from the vast expanse of Jervis or Broken Bay, to the miniature boat harbour of Terrigal, or the spacious crescent of Curranulla, or Providence Bight, offer all the requirements of sea bottom for food and

Fisheries and
Oyster-beds.

* Report (6 February, 1861) of Colonel Ward, R.E., Deputy Master of the Mint.

† A. Oliver, Esq., barrister-at-law.

protection for the young fry, necessary to our southern fish in their various stages of growth." The principal species of New South Wales fish are the bream, mullet, whiting, schnapper, jewfish, kingfish, taraglin, salmon, mackerel, flathead, and garfish. The fishing industry is in a very primitive state, and Mr. Oliver concludes his paper with the hope that "the resources of our seas and rivers may attract the attention or come to the knowledge of some of those hardy and industrious fishermen of the Old Country, who would be willing enough to emigrate, did they but know with how much certainty of success they could ply their calling in New South Wales." The rivers and harbours abound with various orders of shell fish, of which the prawn, lobster, and oyster are the chief. The oyster-beds of Hunter River, Clarence River, Manning River, Cook's River, Clyde River, Camden Haven, and many other places, yield a lavish supply of this "fruit of the rock," and there is an export trade to the adjacent Colonies. The Hon. Thomas Holt, a prominent colonist, has formed extensive claires at George's River, about seven miles from Sydney, where the experiment is sure to succeed, if abundance of mud, fresh and salt water, and tranquillity can ensure success. The famine prices ruling in England must make this branch of our resources more noticeable, and it may not be long before Sydney oysters grace the fish-shops of London.*

Mineral Resources and Progress.

Admirable in pastoral and varied in agricultural resources, New South Wales also possesses a world of mineral wealth which assures to her a great industrial future.

"It is not too much to say that no sooner are we off the carboniferous areas rich in coal and its associated minerals, than we are in a region in which are tracts where gold, copper, and lead abound. And, passing from the sedimentary to plutonic rocks, we can discover granites which, however barren externally, are within frequently charged with the valuable ore of tin. So that the three great geological divisions of our colony are replete with mineral treasures that are practically inexhaustible."†

* We saw the other day a box of oysters which had been kept fresh for a considerable period by the Mort and Nicolle freezing process.

† Address of the Vice-President of the Royal Society of New South Wales, the Rev. W. B. Clarke, M.A., F.R.S., F.G.S., F.R.G.S., &c., 22 May, 1872.

Nothing could better shew the richness of our mineral resources than the multitude of discoveries made by unscientific persons. It is only a few months ago that a public geologist was appointed, and the way prepared for a geological survey! Just as there is nothing which rouses individuals so quickly as discomfort, so nothing can stimulate communities like the pressure of want. The spectacle afforded by the energies of a whole people sharpened by distress besieging Nature in a struggle for subsistence may be a sublime study for the political economist; but certainly the energies of the people of New South Wales have not been quickened by a struggle of the sort. In this country the range of industry above ground is so wide, and its rewards so easily obtained, that it is not surprising our mines have not yet reached far into the dark bowels of the earth.

In giving a very brief sketch of the minerals of the Gold. Colony, and the progress of mining, we will begin with the Gold Fields. As the alluvium became less rich, or rather as the areas worked became exhausted, for there are thousands of miles known to be auriferous not yet prospected, mining for gold in the quartz became more extensive. This branch, however, is prosecuted in a very rough and ready style. We hear now of the erection of better plant in several localities, and hope enterprise will meet with the reward it deserves. Hitherto there have been few great successes, although payable results. The reefs at Hill End are an exception. In 1872 masses of rock nearly all gold were blasted from a considerable depth, some weighing more than a hundred-weight! The wealth of these reefs remained undiscovered for 20 years. One claim gave 30,000 ounces of gold for 436 tons of stone; another, 15,000 ounces for 415 tons; and a third, 1,567 ounces for 22 tons. There are 29 proclaimed fields in the south, 38 in the west, and 7 in the north. The approximate auriferous area in the Colony, so far as known,

is 13,650 square miles.* The yield of gold during the past five years has been:—

	Ozs.	£	s.	d
1871	323,609·79	1,250,484	15	11
1872	425,129·71	1,643,581	16	11
1873	361,784·71	1,395,175	8	7
1874	270,823·31	1,040,328	13	6
1875	230,882·50	877,693	18	0
	<u>1,612,230·2</u>	<u>£6,207,264</u>	<u>12</u>	<u>11</u>

If we compare this with similar periods—

1851-55	£6,338,257
1856-60	5,192,326
1861-65	8,606,291
1866-70	5,069,802
1871-75	6,207,265

we find that the last nearly equals the first, exceeds the second, is less than the third, and is greater than its predecessor by £1,140,000. The total yield is stated as 8,436,114·50 ounces, of the value of £31,413,940 8s. 6d. Besides this, large quantities are said to have passed out of the Colony in private hands. The number of miners varied as follows:—1865, 15,458; 1866, 13,905; 1867, 13,534; 1868, 12,124; 1869, 12,943; 1870, 14,329; 1871, 21,452; 1872, 30,629; 1873, 22,956; 1874, 14,743; 1875, 15,555. The charge for a “miner’s right” is only 10s. a year. Leases of auriferous lands are granted at the rate of £1 an acre *per annum*. The extensive surface to be tested and the infancy of mining enterprise leave us in the dark as to the actual auriferous wealth of the Colony. Should it correspond with experience, the numberless reefs will give employment for an indefinite period. If expectations may rest on the opinions of competent authorities a great future for our gold mining industry is probable. The Rev. W. B. Clarke, the venerable geologist of Australia, not by appointment but in virtue

* *Mineral Map and General Statistics of New South Wales, 1876.*

of his eminent acquirements and services, speaks thus positively:—

“It is not to be doubted that there is an enormous amount of gold yet untouched in numerous places in New South Wales, not only in the quartz lodes (or reefs) but in gullies and plains where alluvial gold diggings will yet be discovered.”

From a copy of the first Annual Report of the Department of Mines (1875) just issued, we find that the average yield of gold per ton of quartz crushed in New South Wales during the year, was 1 oz. 4 dwts. 4·1 grains. Considering the rude appliances this is a very good average, being much more than twice the average yield of the reefs of Victoria. It is estimated that 21·8 per cent. of our gold is carried off in the waste, owing to the absence of the necessary machinery for treating “tailings.” The Under Secretary, Mr. Harrie Wood, remarks:—

“As evidence of the value of some of our pyrites, Professor Liversidge finds that one sample contains gold equal to 218 ozs. 10 dwts. 19 grs. per ton, while a company in the Orange division has had some parcels tested, one of which was found to contain more than 300 ounces of gold per ton.”

In 1870 a Royal Commission visited and reported upon the Gold Fields of New South Wales. The following extract should convince the reader of the high prospects of the Colony as a gold-producer. As it gives the pith of an elaborate inquiry, and the most mature observation, we need not apologise for its length:—*

“A very strong impression exists on our minds, as a result of this examination, that the resources of New South Wales, both in its auriferous treasures and its other mineral riches, have been very much underrated and undervalued. As regards the gold mines, we have seen a great many old and partially abandoned Gold Fields in which it is evident vast quantities of gold yet remain to be unearthed. The individual miner, working chiefly as he has hitherto, merely with his pick and shovel, has no doubt exhausted the ground of nearly all the gold that, by the aid only of such appliances, he could extract; but there yet remains on such old diggings a vast field for enterprise, when he shall be assisted by associated capital and by efficient machinery. Very wet ground, both alluvial and quartz, as also surface hills

* Quoted in Robinson's work on New South Wales.

and the beds of rivers and creeks, are to be found in a great number of places, which, although known to be payable and indeed in much of it known to be rich, remain at the present time undeveloped and unworked. The reason of this is chiefly that the individual miner, however suitable he may be to prospect, and, in most instances to efficiently develop new auriferous ground, has not generally the means for such extensive undertakings and works as are required to extract the precious metal in payable quantities, where the ground on which he operates has been previously worked, and the cream, so to speak, taken from it. The introduction on old or partially worked ground of costly pumping machinery to keep wet claims dry, extensive races or watercourses to bring water to arid ground, and machinery for hauling, crushing, and puddling, would, in a great number of instances, if available to the practical miner, vastly tend to increase our national wealth, and give employment to a greatly increased population. From the rough and imperfect mode in which the gold mines of the Country have hitherto been worked (partly attributable to new rushes taking the miners away from their claims before they had been thoroughly tried, and partly to the want at the time of knowledge of mining and the absence of proper appliances), there are great quantities of old workings which will, we believe, yield a rich harvest when the capitalist can be enticed to lend his helping hand to their development.

In what may be termed new or unprospected ground, our observations induce to the belief that a very large field for enterprise and the use of capital also exists. Gold-mining on a large scale may really be said to be only just commencing in New South Wales, more particularly the branch of it known as quartz-mining. There appears to have been, and indeed to be now, to some extent, an opinion that gold-mining must, from its very nature, be merely ephemeral; that, unlike most other occupations, and indeed other kinds of mining, gold-digging cannot last in the country for any length of time. The shallow and easily-worked diggings, discovered in the early days of the gold discovery, greatly induced this belief, and did much to retard the advancement of the gold-mining interest. Of late, however, deep alluvial leads and rich quartz reefs have come to be worked, which are fast leading to the impression that very many gold mines will, like many tin and copper mines, be worked for many years—it may be for centuries. The idea that quartz reefs ceased to be auriferous at a hundred feet or two beneath the surface is quite exploded. In this Colony, as for instance, at Grenfell, Tambaroora, and Adelong, a depth of 300 feet and over has been reached, and at that depth as good stone obtained as at the surface. In Victoria, 800 feet has been reached in reefs which are yielding rich stone;* and in California we hear of reefs being profitably worked at 1,000 and 1,100 feet beneath the surface. It is impossible to say to what extent reefing, as it is called, may be developed in New South Wales. The country is in many auriferous regions literally covered with auriferous reefs, not rich

This may now be increased to 1,000 feet.

enough, it may be, on the surface, to tempt the individual miner or the promoters of Companies to attempt to work them under the present state of things, but which are yet, many of them, destined, we believe, to yield remunerative occupation to a large population, and employment to much capital.

It is the opinion of many competent witnesses who came before us, that there are immense tracts of country in the Colony which have every indication of being auriferous, but which have as yet not been at all prospected. We concur in the view which is prevalent amongst the gold miners, that it is highly probable that rich and extensive gold fields will be discovered for many years to come; and that the few diggings hitherto worked are but a very small part of the gold mines which are destined to enrich the people of this Country. Mr. Emmett, a gentleman of large experience in gold-mining affairs, particularly in Victoria, one of the witnesses whom we examined, upon being interrogated as to his opinion of the mineral resources of New South Wales, says:—"I consider the auriferous districts of New South Wales far larger than those of any other Australian Colony, and as rich." So also Mr. Travers Jones, the Manager of a Mining Company in this Colony, and a gentleman who for years has been engaged in various mining undertakings, both in Victoria, New Zealand, and New South Wales, says, "There is already a very large extent of known auriferous country throughout those parts of the Colony which I have specified as having been under my own personal observation, which would furnish scope for remunerative operations for generations to come." Mr. James H. Griffin—a gentleman who has been a Gold Commissioner in the Colony, and who at the time of his examination by us was Manager of a Mining Company—bears testimony also to the abundant mineral treasures this Country possesses. He says:—"I believe that, at all events as far as the Braidwood District is concerned, the auriferous resources of the Colony are unsurpassed. There are other indications of mineral riches; both lead and copper have been discovered; precious stones have also been found."

Coal is the most abundant of our minerals. For hundreds ^{Coal.} of miles the coast districts may be said to be one vast coal field. The upper coal measures possess no less than *sixteen seams* near Newcastle, the leading coal port of the Colony. The seam worked there at present is from 8 to 10 feet. In the Western District the same measures contain at least *eleven seams*, the lowest of which, 10 feet thick, crops out near the railway line. The Government Geologist reports of this seam that it dips "at a low angle of from 3 to 5 degrees, and is therefore easily worked, and as it passes under the vast extent of mountain ranges to the north and east it will be inexhaustible

for generations to come." Going south from Sydney we find a series of seams of coal cropping out at elevations within easy reach of the sea, varying from 8 feet of clean coal at Coal Cliff near Wollongong, to Jervis Bay, a very large and sheltered harbour, near which the Chief Inspector of Coal Fields recently examined two seams 39 and 24 feet respectively! *These seams are surrounded with immense quantities of iron ores, fire-clay, and limestone.* It is unnecessary to multiply proofs that both as to quantity and ease of working, New South Wales is the great coal-producer of the Southern Hemisphere. The approximate coal area of the Colony is 24,840 square miles.*

The quality of the coal is conclusively established by the trade with foreign ports, besides our Colonial experience. Large contracts for the supply of Her Majesty's steam fleet in the East have been entered into. The following is a return of the mines now at work, and their output for 1874.† The supply of course depends on the demand, and shipping facilities. New mines are being opened, and many leases of coal lands have lately been applied for.

NORTHERN DISTRICT.

<i>Newcastle.</i>		Tons
Australian Agricultural Company		195,494
<i>Waratah.</i>		
Waratah Coal Company		181,268
<i>Lambton.</i>		
New Lambton Colliery		133,805
Lambton Colliery		127,768
<i>Wallsend.</i>		
Co-operative Colliery		149,699
Newcastle Wallsend Colliery		240,000
<i>Catherine Hill Bay.</i>		
New Wallsend Company (new mine)		18,147
<i>Four-mile Creek, near Maitland.</i>		
Pearse and Company (new)		19,053

* "*Mineral Map and General Statistics of New South Wales, 1876.*" The late Inspector of Coal Mines, Mr. Keene, F.G.S., stated that the vertical section of New South Wales coal exceeded in richness any known mines in the world.

† "*Mines and Mineral Statistics,*" pp. 209-245.

<i>Stony Creek, near Mailland.</i>	
— Harpur (new)	500
<i>Anvil Creek.</i>	
Anvil Creek Company (new)	24,000
<i>Rix's Creek, Singleton.</i>	
E. Campbell (new)	180
SOUTHERN DISTRICT.	
<i>Bulli, near Wollongong.</i>	
Bulli Company	58,506
<i>Mount Pleasant.</i>	
Mount Pleasant Colliery Company	38,985
<i>Wollongong.</i>	
Osborne Wallsend Colliery.....	37,796
<i>Mount Kembla.</i>	
Coal and Shale Mining Company (shale).....	1,000
besides other mines lately or now being opened.	
WESTERN DISTRICT.	
<i>Lithgow Valley.</i>	
Vale of Clwydd Colliery (just opened)	50
Eskbank Colliery	8,600
Lithgow Valley Company	18,000
Bowenfels Coal Mining Company	8,500

The Chief Inspector of Collieries closes his view of the mines for 1874 with the following paragraph:—

“Without any exaggeration we can undoubtedly claim to be in possession of the richest, most accessible, and most extensive Coal Fields in the Southern Hemisphere, which must ultimately make New South Wales the greatest and richest of all the Australian Colonies; and we know the value of them and how much as a nation Great Britain has to depend upon her collieries for her great national prosperity. Our bituminous, semi-bituminous, splint, anthracite, and cannel coals are equal in thickness and in quality to any found in other parts of the world, and we have numerous deposits of petroleum oil cannel coal, some of them superior to any yet found elsewhere. During the last few years the growth of our coal trade has most satisfactorily and rapidly increased; and when the proposed extra shipping appliances are completed at Newcastle, and vessels can have rapid dispatch, our trade will undoubtedly increase at a much greater rate than it is even now doing.”*

* *Mines and Mineral Statistics*, p. 246.

The subjoined figures shew the growth of the coal trade of the Colony down to 1875 :—

	Tons raised.	Value.
1829	780	£ 394
1839	21,283	10,441
1849	48,516	14,647
1859	308,213	204,371
1869	919,774	346,146
1875	1,253,475	765,133

The trade has been more than quadrupled since 1859. Coal lands are leased at 5s. an acre *per annum*.

Tin.

The presence of payable deposits of tin was long ago predicted by the Rev. W. B. Clarke, but not until two or three years ago did the search for tin become a business. The Geologist recently appointed* reported upon a small portion of the stanniferous area (25 miles) that the lodes bear Cornwall characters, and that it will take many years to work out the deposits of stream tin. The yield from the Australian Tin Mines is already more than half that of all the other mines in the world. The following shews the growth of this young industry :—

Tin—the produce of New South Wales—

	Ingots. Tons.	Ore. Tons.	Value.
1872	47	848	£ 47,703
1873	904	3,635	334,436
1874	4,101	2,118	484,322
1875	6,058	2,022	561,311

The value of the tin produced in England in 1874 was £1,056,835, so that in three years our miners have become able to produce half as much as those of the Mother Country. The approximate extent of the stanniferous area is 6,250 square miles.†

* Mr. C. S. Wilkinson, F.G.S.

† *Mineral Maps and General Statistics of New South Wales*, 1876.

The following are the tin mines of New England:—

Moore and Speare's	Grampians	Great Britain
Baalgammon Claim	Six-mile	Vegetable Creek Co.
Little Wonder	Gulf Creek	Waterholes
Cubiss (Tribute)	Tent Hill	Glen Creek
Little Britain	Kangaroo Flat	Banca
Nonpareil	Springs	Tent Hill (Arnott's)
Tornisson's	Rose Valley	Six-mile Company
Vegetable Creek Mine		

Leases of tin lands are issued at a charge of 5s. an acre *per annum*.

The number of known copper lodes is very large, and ^{Copper.} they are to be found in nearly every part of the Colony. New mines are being opened, and smelting works erected, but most of the deposits are at the present time at some distance from railways and markets. That the production of copper is making rapid strides is shewn by the fact that the yield for 1874 is 500 per cent. above that of 1872, and the yield for 1875 is far more than that of the sixteen years 1858–73. The approximate extent of the copper area is 3,300 square miles. The following table, shewing the statistics of this industry, is taken from an official publication entitled the “Mines and Mineral Statistics of New South Wales,” a work long much wanted, and we hope only the forerunner of many others as interesting and valuable:—

COPPER.—The produce of the Colony of New South Wales:—

Year.	Copper.		Copper Ore.		Total.
	Quantity.	Value.	Quantity.	Value.	
	Tons.	£	Tons.	£	£
1858	.....	.....	58	1,400	1,400
1859	.....	.....	150	2,250	2,250
1860	.....	.....	43	1,535	1,535
1861	.....	.....	144	3,390	3,390
1862	.....	.....	2,200	12,000	12,000
1863	125	12,500	.....	.....	14,500
1864	.....	.....	2,100	22,100	22,100
1865	295	29,491	1,648	7,854	37,345
1866	304	23,390	947	4,745	28,135
1867	296	19,866	2,590	15,450	35,316
1868	315	21,420	3,151	12,780	34,200
1869	324	21,446	1,437	5,400	26,846
1870	297	20,060	84	336	20,396
1871	665	47,231	2½	44	47,275
1872	419	36,770	1,466	17,873	54,643
1873	150	14,500	5,877	142,126	156,626
1874	3,638	311,519	.....	.....	311,519
1875	5,991	508,778	254	.....	508,778
	12,819	1,066,971	22,151½	249,283	1,316,254

The following are the principal Copper Mines now being worked :—

The Belara Mine, near Gulgong.
 The Frogmore Company's Mine, Parish of Bula.
 The Peelwood Copper Mines, near Tuena.
 The Great Western Copper Mines, near Orange.
 The Ophir Company's Mine, Brown's Creek.
 The Carangara Company's Mine, Byng.
 The Wiseman's Creek Company's Mine.
 The South Wiseman's Creek Company's Mine.
 The Armstrong Company's Mine, Yetholme.
 The Apsley Company's Mine.
 The Cow Flat Mine, near Bathurst.
 The Cobar Mine, near Bourke.
 Milburn Creek Mine.

Leases of copper lands are issued at a charge of 5s. an acre *per annum*.

Iron.

We have referred to the wealth of iron ores possessed by New South Wales. Although we have no geological surveys as a guide, our present information serves to shew that the raw material in the Colony of this vital element of industry is practically unlimited. Professor Liversidge, of the University of Sydney, formerly Demonstrator in Chemistry at Cambridge, made a visit to one district, and the result was a report proving that it offers a store of iron, coal, and limestone, which it would not be easy to equal within a similar area. The Professor remarks :—

“ In conclusion, I think I may safely say that this portion of the district of Wallerawang seems to be destined to become one of the greatest and most flourishing portions of the Colony. Here within a comparatively small circle of some four miles diameter, there are extensive and rich deposits of iron ores, coal, and abundance of limestone. At present nothing beyond exploratory work has been done with them ; but as the Wallerawang Iron and Coal Company has taken up large selections of the lands for the purpose of erecting iron works, there is a prospect that in a short time an attempt may be made to utilize some of this great wealth. * * * When we consider the great repositories of iron ores which have been already examined in New South Wales, and that we hear of discoveries of others, perhaps equally extensive, there appears to be no reason why New South

Wales, with proper care and management, should not very soon make not only all the iron required for its own consumption, but also supply other Countries which are not so lavishly endowed." *

Another discovery has lately been made on our southern coast, within 20 miles of Jervis Bay, where Mr. Mackenzie, Examiner of Coal Fields, found iron ores in large quantity, yielding $51\frac{1}{2}$ per cent. metallic iron, connected with "*a thick bed of limestone, lying below thick beds of coal.*"† Between Sydney and the above locality, on the North Bulli Coal and Iron Estate, Mr. Mackenzie inspected a bed of argillaceous or clay-iron ore of which Sydney Mint assays gave 32·9, 38·9, 44·3, and 55·7 of iron, of such magnitude that he declared "in all his experience of thirteen years, actually employed in daily visiting the different mines in one of the largest coal and iron districts in Lancashire, England, he never saw a bed of clay iron ore so thick as this."‡ At Carcoar, 173 miles west from Sydney, there are deposits at the back of copper lodes, of which the Government Geologist reports,— "The apparent quantity of iron is immense." He adds,—

"There are many other localities in New South Wales where rich iron ore abounds. The reflection bears with it almost a reproach that, in this Colony, where there exist such immense and valuable deposits of iron ore, with suitable coal and limestone most favourably situated for smelting operations, the large and increasing demand for manufactured iron should have to be supplied from foreign sources."¶

The Fitzroy Iron Mines at Nattai, on the Great Southern Railway, and 77 miles from Sydney, have been well known for a long time. They contain abundant deposits of this ore, with coal and limestone in the same district. A Company was formed some years ago to work the Fitzroy Mines, but it fell through owing to want of skilled labour. We are glad to learn that the mine has passed into the hands of

* Paper on the Iron Ore and Coal Deposits of Wallerawang, New South Wales, by Professor Liversidge, read before the Royal Society, 9th December, 1874.

† *Mines and Mineral Statistics*, p. 237.

‡ *Idem*, p. 146.

¶ *Idem*, p. 146.

wealthy capitalists, who intend to develop its resources. An experienced Manager, sent out by the English Directors of the Company, has been at Nattai for some time. We are privileged to make use of the following extract from a recent report forwarded by him to London :—

“There is a seam of coal on the estate, 21 feet thick. There are a great many veins or pockets of hematite, some very rich, others poor; the ore worked at present gives 50 per cent. metal. The ore is wonderfully pure, and the iron is very strong, and free from any of the injurious combinations which so much affect the making of iron into steel. It also runs very fluid, so that castings, no matter how fine, can be made from it. The deposit of ore at present being worked contains about 1,250,000 tons of ore down to proved depths, but the bottom has not yet been found.”

This Company has purchased the right to work a splendid deposit of ore, about $2\frac{1}{2}$ miles distant; its only fault is that it is too rich. There is only one furnace in play, which turns out from sixty to seventy tons of finished iron a week; the production could easily be made a hundred tons weekly. The last blowing produced 1 ton of iron for every 1 ton 17 cwt. 2 qrs. of ore. For several months a deficiency in the water supply retarded operations, but rain has since fallen, and a plan for conservation is being carried out.*

The works of the Lithgow Valley Iron and Firebrick Company are about 95 miles from Sydney, and are connected by a tramway with the Great Western Railway. The ores consist of (1) beds of clay band stone, varying from six to fifteen inches thick, cropping out on the surface, and averaging 40 per cent. of metal; (2) red silicious ore, of which the bed is about 4 feet, yielding 22 per cent.; and (3) a bed, 2 feet, of brown hematite, yielding 50 per cent. A 10-foot seam of splint coal crops out on the property, overlying a seam of fireclay, from which firebricks have been made, that have stood the severest test of the Mint Assayer. Covering the fireclay there are 5 feet of freestone, now being used for building purposes.

* The Fitzroy iron has been tested to equal the best English, and samples of the Lithgow iron which were tested last week are declared to stand favourable comparison with the best ever imported.

There is abundance of fine loam and sand for foundry purposes; and a never failing supply of water runs through the property, which has an area of 700 acres, intersected by the railway. In addition, this Company has about 1,400 acres, containing an inexhaustible supply of coal, ironstone, and limestone, within ten miles of the present works, and three miles from the Railway Station at Wallerawang. Mr. E. Hughes was the discoverer of the ores and fire-clay, and succeeded in forming the Company. The foundation stone of these works was laid by the Hon. J. Sutherland, on the 2nd of January, 1875, and they were completed in December. The plant consists of one blast furnace, capable of producing from 100 to 120 tons of pig-iron per week, a 70 horse-power engine, two boilers, and the necessary appliances. A foundry is connected with the furnace, producing castings for the erection of rolling mills. The first puddling furnace for converting the pig into malleable iron is just completed. During the eight weeks pig iron was produced upwards of 400 tons of excellent quality were manufactured; but finding the demand for this kind not sufficient, the Company have decided to stop the furnace, and erect foundry and rolling mills so as to turn out castings, railway and bar-iron, boiler-plates, &c. We heartily wish success to Mr. Sutherland and his fellow-proprietors of the Lithgow Company, and Mr. Zollner and the shareholders in the Fitzroy Company at Nattai. They are laying the foundations of the most valuable of all manufacturing industries. The task before them may be an arduous one, but success must sooner or later reward their great enterprise.

Kerosene shale is plentifully distributed. The known Kerosene Shale. area of this mineral is 660 square miles.* There are three mines now at work, one near Maitland in the north, one near Hartley in the west, and one in the south near Wollongong.

* *Mineral Map and General Statistics of New South Wales, 1876.*

The Hartley shale is said to be equal to the richest discovered in any part of the world, yielding 150 to 160 gallons of crude oil to the ton, and 18,000 cubic feet of gas per ton, with an illuminating power equal to 40 candles.*

Silver and
Lead.

Of silver, 281,238 ounces were obtained up to 1874, valued at £77,216. Upwards of 52,000 ounces, valued at £13,000, were obtained during 1875; the account of previous yields is not complete. The principal silver mines are in the South, but our gold is largely impregnated with it. The known approximate area of silver and lead is 500 square miles. There are three mines, one near Yass, one near Bombala, and one near Scone.

Antimony.

Antimony is met with in various localities. From 1871 to 1874, 72 tons of the ore, valued at £897, were treated. In 1875 the production was 142 tons regulus, valued at £5,000.

Cinnabar,
limestone,
and fireclay.

Cinnabar has been found near Rylstone; fireclays exist in the coal fields; and limestone is frequent in the older geological areas.

Precious
stones.

The gems of New South Wales form a varied collection. The most prominent are diamonds, oriental rubies, emeralds, topazes and sapphires, the emerald and beryl, spinelle ruby, opal, amethyst, garnet, zircon, chrysolites, besides common and less valuable kinds, such as the false topaz, cairngorm, and onyx. The diamond localities cover an approximate area of 500 square miles; the best known localities are, Two Mile Flat near Mudgee; on the Macquarie, at Suttor's Bar near Burrendong; and at Bingera. Oriental rubies, emeralds, topazes, and sapphires, with the spinelle ruby, have been found in the neighbourhood of Mudgee, at some places on the Cudgegong River, and on the Meroo; small ones being

* *Mines and Mineral Statistics*, p. 244.

reported from New England. Very fine specimens of the emerald and beryl are said to have been found at Kiandra. Other specimens, well verified, have come from the northern portion of the tin districts. The spinelle ruby has also been found in the Abercrombie Ranges, with very fine specimens of the oriental sapphire, and zircons. The sapphires are dark in colour, some of them being beautifully asteriated. The zircons from this quarter possess a peculiarly rich colour, between a light port wine and a Ceylon ruby. Some beautiful specimens of the rare oriental emerald, the hardest stone known except the diamond, have also been found on the Cudgong River. The opal has been found in several places in volcanic tufa in the Abercrombie Ranges. Thirty miles from Carcoar some very fine specimens of the noble opal have been procured.

The most careless glance at the variety and abundance of the mineral resources of the Colony as brought to light by random discovery or desultory examinations stimulates the hope that no time will be lost in subjecting these treasures to a thorough scientific investigation. It is no extravagance to believe that a geological survey of New South Wales will stamp it as one of the first Countries in point of mineral wealth.*

Geological
survey.

* During the past few days, whilst revising these sheets, we observed the following intelligence in the Sydney newspapers :—

Telegram to the "Sydney Morning Herald" of June 12, 1876.

Carcoar, Saturday.
A large rich lode of black copper was struck at the Milburn Creek copper mine. This is the

finest show of ore seen in this mine. The lode is 6 feet wide and solid throughout.

Paragraph in the same paper, issue of June 13, 1876.

RICH COPPER ORE.—The Major's Creek correspondent of the *Braidwood Despatch* writes : An extraordinary return from a body of ore on one of the Big Hill leads has lately been given by Mr. Mullens, of Araluen, whose assays I may here state are among the most reliable of any in the colony without exception, and the assay in question gives the astonishing return of 236 ozs. 16 dwts. 9 grs. of silver, with four-

teen hundredweight of lead to the ton of ore. Indeed, from many of the leads in the locality of Big Hill lumps of ore may be found, which if put into a blacksmith's fire will melt, and the molten lead will be found in large quantities. The time will come when capital largely and judiciously invested here will develop a permanent and prosperous mining industry ; but without capital of course it cannot be done.

The following is an extract from the latest report of the Geological Surveyor of the Colony (22 August, 1876):—

"The result of my recent examination of this country has convinced me that its mineral wealth is practically inexhaustible; a large extent of the land is such as to offer every inducement to the agriculturalist, and the only requirement now is population and capital to take advantage of these great resources."

Manufactures.

Next to the notices of the pastoral, agricultural, and mineral resources of New South Wales is the appropriate place of manufacturing industry. Under this head there is much upon which the Colony is to be congratulated. In the first place, public policy has laid a sound base for this important interest. Differing on most other points, our Parliaments have always agreed that the best training for manufacturing industry is free competition, and its best support that earned by the sweat of its own brow. We have the sense to perceive that in trade as in politics a free is the only healthy condition; and that to make industry the creature of legislation is to unnerve and degrade it. We believe that in this, as in every country inhabited by Englishmen, profitable

Telegram to the same paper, issue of June 15, 1876.

Gulgong, Wednesday.

Rich quartz was discovered this morning by Mr. Cluff, a prospector. The reef is situated 2 miles from Rouse's sheep-yard. The Good-

man Creek Reef is 2 feet thick impregnated with gold throughout. 1 oz. 17 dwts. were taken from a small parcel of stone. The ground north and south is taken up.

Telegram to the "Sydney Evening News" of same day.

Orange, Thursday, 3.10 p.m.

Great excitement here in consequence of the continued increasing richness of the reef in the Phoenix mine at Lucknow. Wonderful specimens have been obtained to-day, and a new vein of rich gold-bearing pyrites was discovered,

1 foot thick in Ben and Sons' monkey shaft at the lower level in the same mine. This is unexceptionally the richest find in any quantity since the rich gold was struck at Hill End. Great excitement prevails in the local share market.

Telegram in "Evening News" of 17 June, 1876.

Magnificent yield of gold at the Phoenix Mine.

Orange, Saturday, 11.49 a.m.

THE stone raised at the Phoenix Mine continues to be extraordinarily rich; in fact, it eclipses anything of the kind ever seen on the Wentworth. Wonderfully rich stone was raised yesterday. A quantity of stuff is now being

crushed that was obtained before the present rich find, and it is expected to give a return of about 400 ounces. Shares have sold at the rate of £850 each. In one instance the rate of £1,200 has been obtained. There are plenty of buyers, but few sellers, and transactions are only effected at extremely high prices.

This intelligence affords the latest illustration of the openings which the mineral resources of New South Wales offer to the capital and enterprise of the world.

openings for enterprise cannot long be neglected. We know, too, that our advantages for commerce and manufactures are so great that we need not distress ourselves by forced efforts to anticipate them. Such will be the view of all able to see the true bearings of national policy, much more is it the conviction of those who can see what is really the interest of manufacturing industry itself. Protection is an experiment for which the public have to pay dear, but those who embark their capital in the speculation may lose most in the end. A recent agitation in Victoria affords a pointed illustration. A proposal made for the reduction of some protective duties from 20 to 15 per cent. excited quite a panic amongst the local manufacturers. They declared this concession would ruin them, and throw their workmen out of employment. These piteous appeals must have been either genuine or simulated. If the former, they shew how soon men of spirit who learn to lean on supports of the State can descend to the importunity of mendicancy; if the latter, how soon they acquire its hypocrisy. In New South Wales, where manufacturers have always had to fight their own battles, the repeal in 1873 of 5 per cent. *ad valorem* duties, imposed in 1865 for revenue purposes, did not suggest a single remonstrance from them. Not habituated to dependence, their spirit was as sound as their industries. In visiting lately some of the most extensive workshops in Sydney we were pleased to meet with men who, against the competition of the whole world, had worked their way up to the control of establishments employing hundreds of hands, and who concurred in the declaration "*We want no protection!*" Such men are an honour to their country. They are proofs of the vigour which freedom always develops in the Anglo-Saxon, and enable us to look forward with a lighter heart to the future of this Colony, blessed as it is with all the material elements which enterprise such as theirs can transform into national greatness. At the same time it would be absurd to expect manufactures in a young country

under a policy of free trade, to appear as imposing to the eye of a superficial observer as their developments under an artificial stimulus. The unreflecting will probably see more to admire in an edifice run up under a contract which pays everything for dispatch but nothing for safety, than in the foundations which sturdy enterprise has to hew for itself out of the rock of competition, and which therefore rise slowly. But the more profound observer, who knows how long they are to last and what destinies they are to support, will be more pleased with solid foundations however slowly they may be formed than with attractive erections which rest on a quicksand of popular delusion.

We need scarcely make an excuse for so satisfactory a picture as that we are about to present, but still it should not be forgotten that the local markets are so small, and that the markets of Victoria are practically closed against us, whilst our own ports are open to all comers. The following statement of the manufactories, works, &c., of New South Wales is taken from the Statistical Register of the Colony, mining and agricultural machines not being included:—

MANUFACTURING INDUSTRIES.

				1855.	1864.	1874.
Agricultural implement works	..	..	..	..	..	45
Flour mills .. .. .	..	..	..	147	174	172
Tobacco manufactories	..	..	..	8	39	23
Wine presses	..	..	..	..	1	367
Sugar works	..	..	..	..	1	67
Woollen cloth	..	..	..	5	5	8
Tanneries .. .. .	..	..	..	60	94	114
Fellmongering	..	..	..	..	17	35
Meat-preserving	..	..	..	6	9	23
Boiling down	..	..	..	31	57	33
Woolwashing	..	..	..	2	2	33

MANUFACTURING INDUSTRIES—*continued.*

	1855.	1864	1874.
Soap and candle	18	29	31
Distilleries and sugar refineries	3	16	55
Breweries	14	8	31
Brick-making	1	187	182
Engineering works, foundries, &c.	15	108	158
Lime-kilns .. .. .	..	89	104
Saw mills	12	57	152
Potteries	5	7	13
Hat manufactories.. .. .	1	6	12
Rope and cordage	5	4	6
Salt	1	1	1
Dyes	1	7	8
Gas works	1	3	10
Patent slips	2	3	6
Docks	2	3	3
Ice works .. .. .	..	2	4
Smelting Works .. .. .	..	2	25
Chemicals	1	..	1
Ship and boat builders .. .. .	..	7	103
Confectionery .. .. .	..	..	42
Coffee, chocolate, and spice .. .. .	..	5	7
Cordial, vinegar, ink, &c... .. .	..	..	99
Jam .. .. .	..	..	3
Drain pipe .. .. .	..	..	8
Tile works .. .. .	..	..	11
Account book and stationery .. .. .	..	..	12
Bark-cutting .. .. .	..	26	67
Basket .. .. .	..	..	3
Boot and shoe factories .. .. .	..	..	50
Brush and Comb .. .. .	..	..	2
Clothing factories .. .. .	..	..	17
Coach and waggon .. .. .	..	..	99
Glass .. .. .	..	..	3
Kerosene oil .. .. .	..	..	1
Mast and block .. .. .	..	..	2

MANUFACTURING INDUSTRIES—*continued.*

	1855.	1864.	1874.
Marble, metallic paint, organ, box, wire, window blind, saddle and harness, shirt, paper, glue, maizena, &c. ..	..	..	46
Steam joinery .. .. .	..	..	4
Railway carriage works .. .. .	..	3	3
	<u>341</u>	<u>972*</u>	<u>2,405</u>

It will be observed that since 1864 our wine presses have increased from 1 to 367; our sugar works from 1 to 67; woollen cloth from 5 to 8; tanneries from 94 to 114; fell-mongery, 17 to 35; meat preserving from 9 to 23; wool-washing from 2 to 33; distilleries and sugar refineries from 16 to 55; breweries from 8 to 31; brickmakers from 187 to 282; lime-kilns from 89 to 104; potteries from 7 to 13; saw-mills from 57 to 152; machine, brass, lead, and engineering works from 108 to 158; iron, copper, and tin smelting works from 2 to 25; ship and boat builders from 7 to 103; and more than 350 works came into existence for the manufacture of agricultural implements, maizena, starch, glue, chemicals, confectionery, cordials, vinegar, blacking, jam, drain-pipes, tiles, account-books and stationery, shirts, baskets, boots and shoes, bedding, brushes, clothing, coaches and waggons, glass, kerosene oil, masts and blocks, steam joinery, combs, fireworks, metallic paint, marbles, organs, salt, soap, powder, surgical instruments, *et cetera*.

But the best test of the growth of our home industries is the measure of their power to replace importation with their own products; and we have taken considerable trouble to institute a comparison between the trade of the first five years of the last decade and the first five years of the present, in order to ascertain how the Colony has advanced in this respect. We

* This total is evidently below the truth, as establishments under some of the heads, for which a cypher is given, must have existed in 1864, although they had not become of sufficient importance for a place in the Statistics. The returns for 1875 just published, shew a very satisfactory result, increasing the above list by a net total of 300 works.

have always deducted exports in order to get the *net* import for each period. In the nature of the case there can be no absolute certainty about the calculation, but it is sure to be a fair indication of the truth.

THE GROWTH OF THE HOME INDUSTRY OF NEW SOUTH WALES.

Articles.	Net Import, 1860-4. Mean pop. 369,168.	Net import, 1870-4. Mean pop. 541,157.	According to population, net import, 1870-4, should have been	Probable growth of Home Industry.
	£	£	£	£
Agricultural implements	50,262	47,357	73,382	26,025
Apparel and slops, haberdashery, linen and drapery, millinery, hats, caps, and bonnets	6,512,140	5,914,390	9,536,924	3,622,534
Beer	1,030,549	1,029,902	1,504,602	474,700
Cordage and rope	130,437	51,545	190,438	138,893
Furniture	163,692	165,297	238,990	73,693
Flour, grain, and bread	1,794,748	1,397,935	2,620,332	1,222,397
Fruit (dried and bottled)	212,772	196,722	310,647	113,925
Hay	40,625	769	59,313	58,544
Leather, boots, and shoes	1,325,276	235,943	1,934,903	1,698,960
Oilmen's stores	421,601	141,151	615,538	474,387
Provisions	91,791	*	134,015	134,015
Saddlery and harness	209,159	163,000	305,372	*482,587
Rum	270,915	163,749	395,536	142,372
Sugar	1,782,940	2,443,296	2,603,092	231,787
Treacle and molasses	4,183	*	6,107	159,796
Timber	240,503	*	351,135	6,107
Tobacco (manufactured)	298,128	95,736	435,267	*127,708
Vinegar	33,918	28,828	49,520	351,135
Wine	545,461	311,393	796,373	*72,501
	£15,179,100	£12,387,013	£22,161,486	£10,457,269
<i>*Less Actual excess of Exports.</i>				
Provisions .....	.....	482,587*	.....	.....
Molasses and treacle .....	.....	127,708*	.....	.....
Timber .....	.....	72,501*	.....	.....
	£15,179,100	£11,704,217	£22,161,486	£10,457,269

This shews that although our population increased by nearly half, say 46 per cent., our import of the 19 lines specified decreased in actual amount by £2,792,087, and according to population by no less a sum than £10,457,269. This is an evidence of progress in its best sense, for being brought about by the free play of private enterprise it means advantage to all. We do not forget that a reduction of imports may be brought about by a very different cause, the contraction of pur-

chasing power owing to hard times ; but that cannot be the case here, for the five years from 1870 to 1874 have been most prosperous for all classes.

Iron and
engineering
works.

We propose now to give as brief an account as possible of the principal establishments in the leading branches of manufacture, beginning with iron and engineering works. Again we have to give prominence to the name of that invaluable colonist, Mr. T. S. Mort, whose dock and engineering works at Waterview Bay, about 2 miles from Sydney, form the most extensive undertaking of the kind in the Australian Colonies. The dock is about 390 feet in length, and can take vessels drawing 21 feet of water. Adjoining it there are workshops covering an area of 5 acres, in which when at full swing 700 hands are employed in the iron and brass foundries, boiler, locomotive, engine, and ship-building works comprised in this important concern. Most of the locomotives supplied to the Government have been turned out of this establishment. The steamer "Governor Blackall," of 500 tons, was also constructed and entirely fitted out for the Government of Queensland ; and the steamers "Thetis," and "Ajax," for New South Wales. The building of a steamer for the Pilot Service of the port is in progress. Only second in Australia to the foregoing are the works of Messrs. P. N. Russell & Company, at the foot of Bathurst-street, and facing Darling Harbour. This firm have the largest railway rolling stock works in the Colonies ; and for the past five years have made all the waggons and carriages for the New South Wales lines. They have also built steam dredges of great size and power, tugs, gun boats, and iron bridges for the Governments of this Colony, New Zealand, and Queensland. The premises cover an area of 5 acres, and the full complement of hands is 600. But the resolute attitude of the firm during recent strikes in the trade has led to a great reduction in the number of hands.* The works and patent slip of the

* Messrs. P. N. Russell & Company have closed their works for the present.

Australasian Steam Navigation Company occupy $6\frac{1}{2}$ acres, and employ 437 men. This Company have constructed 22 steam vessels, 134 large boilers, and 28 engines. The following steamers have been lengthened :—The “Clarence,” “Collaroy,” “Samson,” “Telegraph,” “Yarra Yarra,” “Illalong,” “Boomerang,” “Queensland,” “Wonga Wonga,” “Leichhardt,” “Florence Irving,” “Black Swan,” “Egmont,” “Lady Bowen,” and “The Hunter.” The fleet of the Company is now so large that the works are always busy. There are many other rising foundries, such as those of Vale & Lacey, Chapman, Wright, Bell, and Davy. The increase in the number of establishments since 1864 is fifty, being at the rate of nearly 50 per cent. for the ten years.

The growth of manufactures in leather during the past Boot factories. ten years is fairly surprising. Only a few years ago were they found worthy of a place in our Statistical Register. In 1874 there were fifty manufactories, and the returns just published for 1875 shew a total of eighty-one. We had the pleasure of visiting one of these establishments, that of Messrs. Alderson & Sons, in Bourke-street, where every branch is followed. The premises cover $3\frac{1}{2}$ acres. The latest improvements in machinery are adopted as they are patented in England or America. At the present time about 500 hands are at work, and the local and intercolonial demand increases. The Messrs. Alderson hold medals from three International Exhibitions—two at London and one at Paris. The firm of Wright, Davenport, & Company, of Marrickville, have not been so long established, but they already employ 350 hands, treating annually about 116,500 hides and skins, and turning out 200,000 pairs of boots. The other leading factories are those of Mr. E. Vickery, Mr. Tebbutt, Mr. J. Vickery, and Mr. Dadswell. The best proof of the growth of this industry is the fall of the net importation from £1,325,000 in 1860-4, to £236,000 in 1870-4. Allowing for increased

population, the difference amounts to £1,700,000 in favour of the later period. The export of our boot and shoe manufactures for 1875 was valued at £50,000.

Clothing
factories, &c.

The clothing factories of the Colony have sprung up during the past seven years. In 1867 not one appears in the returns; in 1874 there were seventeen, and in 1875 this total increased to thirty-two. Of these, one firm employs 600 hands, one 500 hands, one 400 hands, two over 300 hands, and the others range from 50 to 250 hands. A leading employer assured us he was able to supply Sydney made clothing of the ordinary sorts to the country storekeepers cheaper than the importer of English slops; and that, in all cases where labour did not form the predominating cost, English goods are not imported now for the interior. Considering that not a penny of Customs' duty is levied on soft goods this progress is remarkable. Every branch of dress and bonnet making and millinery is in an advanced state, and the splendid show-rooms of the city shops owe most of their attractions to fair Colonial hands, apt imitators of the latest European fashions. The growth of the various branches of this industry, as shewn in the statistics of importation, has led to an estimated fall of at least £700,000 per annum in the import rate of ten years ago.

Carriage and
waggon manu-
factories.

The carriage, buggy, coach, and waggon manufacture has rapidly grown from a very small beginning to a total of ninety-nine establishments, and a leading employer tells us that the supply of labour is quite inadequate to the demand. For style, durability, and finish the carriages, buggies, and omnibuses of the Sydney manufactories are of the first order of excellence. The woods of the Colony, such as the blue-gum, spotted-gum, and iron-bark, are said by practical men to be unsurpassed for heavy work, but we have found nothing yet to equal the American ash and hickory for light work.

Sugar works, distilleries, and refineries, have risen from 17 in 1864, to 67 in 1874 ; and the total for 1875 is 82. This is owing to the rise of the sugar-growing industry on the Northern rivers. The Colonial Sugar Refining Company is by far the most extensive concern. This Company lately erected large crushing mills at the Clarence River, and have now contracted for the building of a manufactory at Pyrmont, in Sydney harbour, which is to be eleven stories high. On the Tweed and Richmond Rivers crushing mills are being provided for the growers, but not rapidly enough to keep pace with cultivation. The quantity of sugar manufactured in the Colony during 1874 was 137,104 cwt., and there were 423,564 gallons molasses. The Sugar Company make a fine sample of rum from the molasses. The quantity of sugar refined in 1874 was 315,995 cwt. In 1865 there were only 128,000 cwts. refined and scarcely any manufactured. Sugar works.

Ship and boat building establishments have increased from 7 in 1864, to 103 in 1874. The building of the larger class of vessels is carried on in the rivers on the coast. The vessels are all faithfully built, and the woods of the Colony are well adapted for the purpose. But the stumbling block is the excessive rate of wages that must be paid for first class men. Our builders cannot compete against the cheap craft of other countries, but when quality is looked for they have the best chance. Little foresight is needed to anticipate the importance of this great industry, and that it will in future years launch many a vessel to spread trade among the isles of Polynesia. Ship and boat building.

Wine-presses have risen to 307. This industry furnishes another telling evidence of the strides the Colony is making in production. As so vast an area in New South Wales is suitable for the vine, there is no limit except demand to the Wine-presses.

expansion of the trade. When experience shall have passed the stages of experiment, and the prejudice of the English consumer is overcome, the export of wine will become a leading item. The more notable cellars are those of Mr. J. T. Fallon, at Albury, with a capacity of 250,000 gallons, those of Mr. Doyle, at Kaloudah, Mr. Wyndham, at Bukkulla, Mr. Munro, Singleton, Carmichael Brothers, Seaham, Mr. Carl Brecht, Denman, Greer and Company, Albury, Mr. P. F. Adams, Ettamoga, Dr. M'Kay, Minchinbury, Mr. Serisier, Dubbo, and others. The wines of all the vigneronns we have named have a high character. The future before this industry may be imagined from the official testimony of Mr. Keene, of the London Custom House, who thus describes two samples of the Bukkulla wine:—

No. 1, Red: Vintage, 1866: degree of proof spirit, 26.

Very fine wine, Burgundy character; not unlike a wine made from Oporto grapes, without added spirit; soft and pleasant on the palate; will certainly improve by age. Has great body, deep colour, a high natural spirit; exceedingly pure in flavour.

No. 2, White: Vintage, 1866: degree of proof spirit, 24.

A splendid wine in every respect, exquisite flavour, good body, high natural spirit; these two samples are equal to any known wines.

Custom House, London,

"J. B. Keene." *

April 23, 1868.

The position Colonial wine is obtaining in the local market is shewn by the estimated decrease of about £100,000 a year in the importation of foreign wines. Mr. Fallon's brandies were pronounced by the jurors for beer and spirits at the late Melbourne Exhibition as "equal to the best French brandies." This enterprising gentleman has secured the valuable services of M. Frère, a gentleman of French experience, who is engaged in a series of experiments with a view to the introduction of Australian champagne.

Breweries.

The breweries of New South Wales are as flourishing as their fellow industries. They rose from 8 in 1864 to 31 in 1874. A few years ago Colonial ale was only drunk by those

* "Sydney Morning Herald" of 15 July, 1868.

whose poverty and whose thirst for beer were equal. Thanks to the "Castlemaine ale" of Messrs. Fitzgerald and Prendergast, which was a vast improvement on the current quality, Colonial ales have greatly improved, and are now fashionable; they are certainly more suited to the climate than the English brands. Several large breweries are being erected near Sydney. We could give no better proof of the quality of the Sydney brews than the first prizes for ale and porter won at the late Intercolonial Exhibition at Melbourne, by Messrs. Fitzgerald and Prendergast and the Messrs. Toohey.

The two largest steam joinery establishments are those of Messrs. Goodlet & Smith, at Pyrmont, Redfern, and Waterloo, and Messrs. Hudson Brothers, of Redfern. ^{Saw-mills and steam joinery.} The chief works of Goodlet & Smith face Darling Harbour, and in them about 100,000 feet of timber are sawn weekly, nine-tenths of which are of Colonial hardwood, cedar, beech, and pine. Every sort of building materials is manufactured by this firm. They have two large potteries also, where sewage pipes from 3 to 24 inches in diameter, building and paving brick, and all descriptions of stoneware are made. Bricks to the number of 180,000 or 200,000 a week are turned out. The number of hands employed is 250, who receive over £500 weekly in wages. The carrying trade employs several vessels, and 45 town drays. This firm find difficulty in satisfying the demand arising out of the activity of the building trades. The younger firm of Hudson Brothers are gathering a large business; they cut up about 80,000 feet of timber per week, and employ from 140 to 160 hands. The total number of works rose from 57 in 1864 to 152 in 1874. The net import of timber during the years 1860-4 was £240,503. During the years 1870-4 this import was changed to our net export of over £70,000.

Meat preserving is an industry which has attained considerable proportions, and its operations would become ^{Meat pre-serving.}

larger but for the excited state of the market for live stock. A short time ago large European contracts were offered in Sydney, but for the reasons stated were declined. The freezing works of the N. S. W. Food and Ice Company, which have cost about £100,000, will shortly, it is to be hoped, send a trial shipment to England; and if Mr. Mort can despatch carcasses by the shipload, in their natural state, to be landed in Europe with freshness and flavour entirely preserved—as we believe he can—then this industry of meat-preserving will be at once revolutionised. The number of Companies rose from 9 in 1864 to 23 in 1874, and the net import of £91,791 worth of provisions in 1860–4 became in 1870–4 a net *export* of about half a million sterling.

**Tobacco manu-
factories.**

Tobacco factories are fewer in number now than in 1864, but the manufacture has almost doubled itself during the same period. In 1865 the tobacco manufactured was 896,000 pounds; in 1874 it was no less than 1,678,000 pounds. During 1870–74 the net import of manufactured tobacco was only £95,000, against £298,000 in 1860–64. The Virginia firm of Cameron, Dunn, and Company have established an extensive factory in Sydney, and the local firm of Dixon and Sons are about to remove into a larger factory, which is being built. In a few years the importation of American tobacco, except in leaf, will be a thing of the past.

Woollen cloth.

The manufacture of woollens is one of the oldest, but until very lately the most sluggish of our industries. We are glad to learn the finest machinery to be got in England has arrived for one of the factories, and that other manufacturers are also introducing improvements. Three large works have been added to the list. The production last year was 458,880 yards, an increase of *forty per cent.* on the previous year.

Ice works.

The ice works of the Colony are very noticeable. At Messrs. Mort and Nicolle's works an invention has been applied which gives from 20 to 25 tons of ice for 1 ton of fuel.

Smelting works have increased from 2 in 1864 to 25 in 1874. The recent discoveries of tin and copper account for this growth. The export of smelted tin and copper, although only a few years old, approaches £1,000,000 per annum in value. In 1864 there was not a single pound's worth exported. We have alluded at length to the iron smelting works.*

The manufacture of kerosene oil from shale, in which the Colony abounds, is carried on by a large Company known as the "New South Wales Shale and Oil Company," who own mines in the western district, and manufacture the oil at works at Waterloo, near Sydney, which have cost £40,000. Their oil, known as the "Comet" oil, is certified by analysts to be quite equal in quality and superior in safety to the best American. It has obtained the market to the extent of about 300,000 gallons, with increasing demand.

There are 100 establishments of this description. Barrett & Company, the English firm, have opened a manufactory, and a large edifice is completed for Schweppe and Son, whose staff has arrived from London.

Woolwashing works rose from 2 in 1864 to 33 in 1874. The largest is at Collingwood, near Liverpool. This property belongs to the Hon. Saul Samuel, and covers upward of 20 acres of land. The appliances are complete; about 2,000,000 pounds of wool were scoured last season. There are 4 steam-engines at work.

These works are very interesting and promise well. At the glass industry 50 hands are employed. The great difficulty is the want of skilled labour. The proprietor speaks highly of the character of his apprentices, and their quickness in learning the work.

* See pp. 75-7.

We regret that want of space prevents a more extended notice of the many interesting establishments to which we have not separately referred; but we can say of most that they enjoy a state of prosperity. When the reader reflects that the whole of this diversified array of factories is *the manufactural development of a scattered population not greater than that of an English city*, and that this population has scarcely reached even its agricultural stage of national life, he will come to acknowledge that New South Wales has made very satisfactory progress in the arts which minister to the wants of mankind.

Commerce.

It is the belief of the people of New South Wales that trade should not be fettered. Our laws do not proscribe as a heresy to be put down by fiscal penalties the doctrine "that it is best to buy in the cheapest and sell in the dearest market." With us commerce does not grow in spite of the tariff, but as far as may be with its aid. If the expenses of government allowed, all our Custom Houses would be closed, and all our ports free. The doctrine of FREE TRADE has long been accepted by this Country. Indeed, thanks to the efforts of that venerable and distinguished Australian statesman, Sir Edward Deas-Thomson, who was for many years the chief local adviser of the Crown before the grant of a popular Constitution, and in that capacity contrived to earn both the approval of his Sovereign and the cordial esteem of the people, our Tariff of 1852, which although adapted to produce a large return was composed of only *thirteen* items, brought about a nearer approach to free trade than had been thought of by reformers in the Mother Country. The measure would probably have remained law until now had not the exigencies of public finance made it necessary to impose new duties. An *ad valorem* duty of 5 per cent. was enacted in 1865, but in 1873 a prosperous exchequer allowed of its repeal, which was carried at the close of that year with scarcely any opposition. At the same time thirty items

of specific duty were removed. The present Tariff will be found in the Appendix. Free trade is considered to be now on its trial in New South Wales, and protection in Victoria. Public opinion in the other Colonies has not been clearly pronounced. By a strange perversity, the Colony which has fixed upon herself the trammels of the restrictive policy had the better start in commerce, but the less chance in manufactures, because destitute of coal, except as geological specimens, and compared with New South Wales poor in all the other essential minerals. Were it not for the Riverina trade the evils of the policy of Victoria would already be too obvious to be disputed. But the increase in the wool in the pastoral districts of New South Wales or her south-west border conceals the full significance of the change.* The public of this Colony can have no reason to be pleased by the errors of a neighbour. Victoria is one of our best customers, and her welfare is therefore our interest. Taking a broader view, every colonist ought to look upon Colonial topics as an Australian. The communities settled upon this continent, and contending so zealously for their own advancement, are really hastening the unification of the group as much as their own progress. In this light we rejoice at the emulations which animate them, and deplore divergences of policy which tend to dim the prospect of federation.

The evidence of the advance of New South Wales afforded by her commerce is not less satisfactory than that of her producing industries. Not very long ago nearly the whole of our trade was engrossed by the Mother Country. Now, we have a Colonial and Foreign trade of upwards of £15,000,000 a year. Nor is it to be inferred that our trade with the United Kingdom has suffered, for it has almost doubled itself during the past ten years. We buy and sell

* According to the Statistical Register of this Colony, the exports of wool from New South Wales to Victoria, for shipment to England, has increased from £648,511 in 1865 to £2,199,992 in 1874. As this appears in the Victorian statistics first as an import and then as an export, the great increase conceals the slow growth of home production.

in many of the great markets of the world. The following will afford an idea of the growth of the trade of the Colony :—

			Imports. £	Exports. £	Total. £
1835	...	...	1,114,805	682,193	1,796,998
1855	...	...	4,668,519	2,884,130	7,552,649
1875	...	...	13,490,200	13,671,580	27,161,780

It will be seen that 1875 shews an advance of *over two hundred and fifty per cent.* on 1855, four years after the gold discovery. But past progress would be a poor consolation in a declining state. Let us, therefore, compare the first year of the present decade with that for which we have the latest returns :—

			Imports. £	Exports. £	Total. £
1870	...	...	7,757,281	7,990,038	15,747,319
1875	...	...	13,490,200	13,671,580	27,161,780

The increase of £11,500,000, or *seventy per cent.* in our trade since 1870, is a fitting outcome of the unexampled prosperity which has attended New South Wales during the past few years. Our satisfaction is enhanced by the proof we have given that in many branches of industry home manufacture has greatly contracted the operations of the importer. More satisfactory than all, the increase is not in the transshipment of the products of other Countries, but in the sale of our own, as the following particulars shew :—

Exports, the produce and manufacture of New South Wales.

	1870. £	1875. £
Coal	267,681	671,483
Gold	1,585,736	2,094,505
Copper	65,671	298,224
Tin	Nil.	521,920
Wool	2,741,141	* 5,651,643
Live Stock	777,146	1,191,298
Grain	110,346	150,206
Tallow	227,424	111,522
Hides, Leather, Boots and Shoes ..	128,033	242,940
Preserved Meats, &c.	63,869	73,712
Timber	32,216	69,839
Other articles	268,466	417,257
	<u>£6,267,729</u>	<u>11,494,549</u>

The increase has been no less than £3,821,310, or 60 per cent. For the first time since 1851, the Mother Colony surpasses Victoria in her exports of own produce and manufactures, the totals being £11,494,549 and £10,571,806 respectively.

As might be expected, our export of manufactured articles is still small, but the following list proves how wide a range they are acquiring. It needs no prophetic eye to discern in the schedule the beginnings of a great export trade.

Acids.	Grindery.
Aerated waters.	Houses—wooden.
Agricultural implements	Hardware.
Apparel and slops.	Hats and caps.
Arrowroot and sago.	Ice.
Bags and sacks.	Iron and steel.
Baskets.	Machinery.
Bedding.	Mats and matting.
Beer.	Molasses and treacle.
Bellows.	Manure.
Biscuits.	Naphtha.
Boats.	Oars.
Books.	Oil—kerosene.
Bricks.	Do. other.
Brushware.	Oil stores.
Building materials.	Paper.
Butter and cheese.	Pictures and paintings.
Carriages, gigs, and bicycles.	Pipes—iron.
Carriage and cart materials.	Pitch, tar, and resin.
Carts, drays, and waggons.	Safes—iron.
Casks.	Steam launches.
Coffee.	Shooks and staves.
Coke.	Soap and candles.
Charcoal.	Silver.
Confectionery and preserves.	Sarsaparilla.
Cordage.	Spirits—distilled.
Cordials.	Saddlery.
Drugs and medicines.	Stones—dressed.
Drain pipes.	Sugar.
Earthenware.	Tarpaulins.
Flour, wheaten.	Tinware.
Do. corn.	Tobacco.
Furniture.	Wine.
Fire-clay.	Woollens.
Glue.	

The following comparison will give, although not an absolute proof, still a very fair idea of the fruitfulness of industry in New South Wales.*

Countries.	Population at last enumeration.	Trade.	Per head.
Austria and Hungary	(1869) 35,904,435	(1872) £97,462,246	£2 14 3
France.....	(1872) 36,102,921	(1873) 320,000,000	8 17 9
Russia in Europe ...	(1867) 63,658,934	(1872) 113,875,000	1 15 9
Great Britain	(1871) 31,817,108	(1873) 682,292,137	21 8 10
The United States..	(1870) 38,558,371	(1874) 230,737,876	5 19 8
Canada	(1871) 3,602,321	(1873) 44,923,240	12 9 2
NEW SOUTH WALES	(1871) 503,981	(1874) 23,639,342	46 18 0

In other words, this young Colony has an external trade, according to population, nearly four times that of Canada, more than five times that of France, nearly eight times that of the United States, more than sixteen times that of Austria and more than twenty-five times that of Russia; and our average is already more than double that of the Mother Country, the greatest of all commercial nations.

The geographical position of the Australian Colonies will become more favourable for commerce with the advance of industry among the islands of Polynesia, and in the East. At present, distance may preserve them from most of the dangers of European strife, but they are far from great highways of trade. When the British flag was planted in Australia a less promising field for the enterprise of the trader could scarcely be conceived. The whole hemisphere was a dark enigma, attractive only to heroic adventure. The growth of commerce had always been slow, and its spread in latitudes so remote might well appear the task of future ages. How astonished would have been the British merchant of that day to learn that within the lifetime of his children civilisation would reach a new meridian over the barbarous continent which Cook had just added to the possessions of his Sovereign; that steam would speed its merchandise and

*All these facts, with the exception of our own trade, are taken from the *Statesman's Year Book for 1875*.

electricity flash its orders to the centres of trade ; and that its capitals would boast of averages in shipping and commerce far exceeding those of any other country.

The progress of the shipping trade of New South Wales ^{Shipping.} corresponds with the growth of its commerce. Not only has the quantity of tonnage nearly doubled itself during the past ten years, but the advance in its quality has approached quite a revolution in character. The sailing vessels now trading between the ports of the United Kingdom and Sydney are of the first-class, some of them as smart as any afloat ; and recently steamers of the largest size, such as the "Whampoa" and the "St. Osyth," have entered upon the trade, the abundance of cheap coal in the Colony offering every facility for steam traffic. The contract concluded with the Pacific Mail Company for a monthly mail service to San Francisco and from San Francisco to Sydney, has made familiar to us some of the finest specimens of American and Clyde construction, such as the "City of San Francisco," the "Zealandia," and the "Australia." The steamers with which the Company propose to carry out their contract are :—

The City of San Francisco	500 h. p. nominal.	3,400 tons.
The Zealandia	500 " "	3,200 "
The Australia	500 " "	3,250 "
The City of Sydney	500 " "	3,400 "
The City of New York	500 " "	3,400 "

Then there are the new steamers of the Eastern and Australian Company, which carry out the Mail Service *viâ* Torres Straits for the Government of Queensland, and coal and refit in Sydney each trip. A large steamer of the P. and O. Company, the "Avoca," plying between Melbourne and Sydney, keeps us in connexion with the Mail Service *viâ* Galle ; so that we have the benefit of constant and rapid steam communication with all parts of the world, by three

routes. The more considerable of the local Steam Companies are :—

The Australasian Steam Navigation Company
 The New Hunter River Steam Navigation Company
 The Illawarra Steam Navigation Company
 The Clarence and New England Steam Navigation Company
 The Clarence and Richmond Rivers Steam Navigation Company.

The fleet of the "A. S. N. Company," as it is popularly called, consists of more than thirty steamers, which engross the largest share of the intercolonial steam trade. Some of the vessels are 1,000 tons, and have done good service in the Ocean Mail Service when openings occurred. During eight trips between Sydney and San Francisco the "City of Melbourne" was always within contract time, sometimes with four days to spare. Whether we view the deposits of coal and iron ore, the variety of timber adapted for ship-building, or the position and advantages of our metropolitan harbour, we feel no difficulty in concluding that the head quarters of the shipping interests of the Southern Hemisphere will be that capacious and beautiful haven to which Cook gave the name of PORT JACKSON.* The following are the shipping statistics for the periods given :—

	Inwards. Tons.	Outwards. Tons.	Total tons.
1823.....	20,824	22,332	43,156
1833.....	50,164	49,702	99,866
1843.....	110,864	110,026	220,890
1853.....	336,852	341,540	678,392
1863.....	479,827	511,373	991,200
1873.....	874,804	887,674	1,762,478

These figures shew the increase during the last decade to have been 771,278 tons, or 78 per cent. The years 1874 and 1875 compare with 1873 as follows :—

	Inwards. Tons.	Outwards Tons.	Total tons.
1873	874,804	887,674	1,762,478
1874	1,016,369	974,525	1,990,894
1875	1,109,086	1,059,101	2,168,187

* So called after Sir George Jackson, Bart., M.P. for Weymouth, then Secretary to the Admiralty. He afterwards assumed the name of Duckett, which is still borne by his grandson, the present Baronet.

an increase of 400,000 tons in two years. The total for 1875 gives $3\frac{1}{2}$ tons per head of the population.

The total number of vessels built and registered in the Colony from the year 1841 is as follows :—

	Vessels built. No.	tons.		Vessels registered. No.	tons.
Steamers.....	191	} 61,314	Steamers.....	389	} 397,06
Sailing-vessels ..	797		Sailing-vessels ..	2,768	

The number on the register at the present time is 573, 169 steamers and 404 sailing-vessels, and their tonnage is 72,112. The tonnage built in 1875 was 6,440, and that registered 16,100, the former being nearly double the highest previous yearly total.

If we have delayed reference to the moral, social, and intellectual condition of New South Wales it has not been because we undervalue their importance but because we look upon them as the crown of our material advantages. In the case of a settlement far from the influences of European civilisation, and where the axe of the pioneer must clear the way for the flowers of the mind, the intelligent reader will be prepared to make large allowances. We are happy, however, to believe that the only allowance necessary is the admission that the wide diffusion of our population, and its scanty number, present difficulties which the most enlightened policy or zealous effort cannot entirely overcome. There is, nevertheless, an earnest desire shewn on all sides to carry to the families of distant settlers the ordinances of religion and the means of instruction. There may be warm disputes as to methods, but there are none as to the importance of the work. The orderly conduct and prosperous circumstances of the colonists facilitate the efforts of the clergyman, the schoolmaster, and the journalist; and there are now few villages which do not enjoy the benefits of their labours.

Moral, social,
and intellec-
tual condition.

Religious
statistics.

The relations between Church and State in New South Wales are very simple. In 1862 aid from the public treasury to the various denominations was withdrawn, the rights of incumbents being respected for life. Our religious bodies are on an equal footing before the law. If any question arises it is settled by the logic of numbers. The Church of England within the Colony is governed by five bishops; one in the diocese of Sydney, one in the diocese of Newcastle, one in the diocese of Goulburn, one in the diocese of Bathurst, and one for Grafton and Armidale. The Lord Bishop of Sydney is the Primate of Australia. The Roman Catholic Church is controlled by an Archbishop, a Coadjutor-Archbishop, and the Bishops of Maitland, Goulburn, Bathurst, and Armidale. The Presbyterian Churches are, the Presbyterian Church of New South Wales and the Synod of Eastern Australia. Then there are the Congregational Union of New South Wales, the Wesleyan Methodist Church, the Baptist Church, the Primitive Methodist Church, Particular Baptist Church, the United Methodist Free Church, United Free Gospel Church, Independent Methodist Church, German Evangelical Church, Evangelical Lutheran Church, Unitarian Church, Jewish Synagogues, and the Christian Israelites.

The following table gives a view of the numerical strength of the leading Churches, and their Sunday-schools:—

	Number of Licensed Clergymen.	Number of Churches and Chapels.	Average Attendance.*	Sunday Schools.	
				Teachers.	Scholars— Average Attendance.
Church of England	190	344	57,925	2,264	19,135
Roman Catholic Church	156	222	56,332	951	11,912
Presbyterian Church	79	140	18,598	738	5,099
Wesleyan Methodist Church ...	84	241	30,068	1,695	10,692
Congregational Church	35	50	7,158	506	3,652
Baptist Church	13	16	2,300	99	626
Primitive Methodist Church.....	18	49	7,650	326	2,400
Others	26	27	3,349	152	952
	601	1,089	183,380	6,731	54,468

* Two attendances of one person on the day of enumeration counted as one only.

It will be admitted that a licensed clergyman for every 1,000 souls, a church or chapel for every 550, and a Sunday-school teacher for every 100, is not by any means a bad ecclesiastical picture.

The Parliament of New South Wales was among the first Education. in the British Empire to recognise the claims of learning by the formation of a popular University. The Sydney University, which was incorporated in 1851, and has cost up to the present time in buildings and endowments about £200,000, is for many reasons a most interesting edifice. Its purpose, which was to offer the highest forms of culture to all, "without any distinction whatsoever," shewed the liberal principles of its founders. By a pleasing coincidence, the man who led the agitation for popular rights was the leading promoter of this People's University.* The importance of combining moral and religious influences with the intellectual training of the students was acknowledged by large votes in aid of private subscriptions for the erection of Affiliated Colleges, of which there are now three, the Anglican College of St. Paul, Roman Catholic College of St. John, and the Presbyterian College of St. Andrew. The University receives an endowment of £5,000 a year, and each of the Colleges £500 for salary of a Principal. Considerable sums have been bestowed by wealthy colonists for scholarships and prizes. By a Royal Charter graduates are entitled "to the same rank, title, and precedence as graduates of Universities within the United Kingdom." Without staying to allude to the private institutions, of which there are several of a high class, including the Sydney Grammar School, partially endowed by the Government, we come to the Primary Schools of the Colony. In 1866 a Bill introduced by the Hon. Henry Parkes was passed, which terminated the dual administration of National

* The late W. C. Wentworth.

Religious
statistics.

The relations between Church and State in New South Wales are very simple. In 1862 aid from the public to the various denominations was withdrawn, incumbents being respected for life. Our religion is on an equal footing before the law. If any is settled by the logic of numbers. The Colony is governed by five dioceses of Sydney, one in the diocese of Goulburn, one in the diocese of Grafton and Armidale. is the Primate of Australia. controlled by an Archbishop. the Bishops of Maitland, The Presbyterian Church of New South Wales and there are the Congregational, the Wesleyan Methodist, Primitive Methodist, United Methodist, Independent, Evangelical, and Synagogue. In 1875, a further sum of £70,000 to the vote, doubling the grant of £120,000 in 1874.

A condition requiring parents to contribute towards the erection of a Public School in their locality has been abolished.

The Schools under the Council of Education exceed a thousand. The following is the advance of instruction generally during the past ten years:—

	Number of Public and Private Schools.	Teachers, Male and Female.	Scholars.
1865.....	1,067	1,467	53,453
1874.....	1,547	2,438	119,133
1875.....	1,586	2,542	127,756

An increase in the decade of 45 per cent. in schools, 67 per cent. in teachers, and 123 per cent. in scholars, witho

and Denominational School Boards, and established a Council of Education and a system of "Public Schools," with a due regard to the vested interests of the denominations. The Act provides for four classes of schools, public, denominational, half-time, and provisional schools. The two latter are intended to meet the exigencies of the bush. The course of instruction ranges from the three rudiments up to grammar, geography, singing, drawing, Latin, geometry, and algebra, with the Scripture lessons of the Irish National Board for the more advanced pupils. The fees slightly vary, but they are about 9d. a week if for one child in a family, $7\frac{1}{2}$ d. each for two, 6d. each for three, and $5\frac{1}{4}$ d. each for four. If parents are unable to pay, a reduction of the charge is made, and if necessary the children are admitted free from any charge whatever. The increase in the number of children attending has been very great of late years, especially during the three years ended 31st December, 1874. From 77,889 in 1871 the attendance rose to 119,133 in 1874, an increase of 42,000 children, or over *fifty-three* per cent. In 1875 Parliament supplemented the annual vote by an additional grant of £60,000, adding a further sum of £70,000 to the vote for 1876, thus doubling the grant of £120,000 in 1874. The condition requiring parents to contribute towards the erection of a Public School in their locality has been abolished.

The Schools under the Council of Education exceed one thousand. The following is the advance of instruction generally during the past ten years :—

	Number of Public and Private Schools.	Teachers, Male and Female.	Scholars.
1865.....	1,067	1,467	53,453
1874.....	1,547	2,438	119,133
1875.....	1,586	2,542	127,756

An increase in the decade of 45 per cent. in schools, 66 per cent. in teachers, and 123 per cent. in scholars, without

any compulsion whatever, is one of the most gratifying facts in the progress of the Colony. There are many children not yet overtaken by the schoolmaster ; but the desire that every child in the land shall acquire at least the rudiments of mental improvement is so general that the means are sure to follow, except perhaps in the least inhabited localities.

The Sydney Corporation was established in 1842. In Municipalities. 1858 an Act was passed* providing for the creation of Municipalities in other parts of the Colony on petition of residents. Under this law thirty-five municipalities came into operation. In 1867 a comprehensive measure was passed† providing for the incorporation, on like petition, of boroughs and municipal districts ; the former in cities, towns or their suburbs, or country districts with a population of not less than 1,000 souls, the area of a borough being limited to nine square miles ; the latter in country districts, and to contain not less than 500 souls within an area of fifty square miles. Provision was made for the formation of free libraries and infant schools. The titles of " Mayor " and " Alderman " were substituted for " Chairman " and " Councillor. " A grant from the public funds was enacted on the following scale : For first five years an amount equal to rates collected and subscriptions paid for corporate purposes ; during a further term of five years, an amount equal to half of such receipts ; and during a third term of five years, an amount equal to one-fourth of such receipts ; the endowment then to cease. The rates imposed are restricted to one shilling in the pound for ordinary purposes ; but special rates are leviable for drainage, sewage, water, and gas, not to exceed one shilling in the pound in the aggregate ; provided that there may be a special water rate of 5s. per room per year. Since 1867 the number of Corporations has more than doubled,

* 22 Victoria No. 13.

† 31 Victoria No. 12.

being now 77. The following is a list in the order of their age :—

1842.

SYDNEY CORPORATION.

1859.

Randwick	Glebe
Wollongong	Grafton
Albury	Central Illawarra
Goulburn	Redfern
Shellharbour	Kiama
Newcastle	Waverley

1860.

Orange	Woollahra
Balmain	Paddington
Mudgee	Waterloo

Cudgegong.

1861.

Hunter's Hill	Marrickville
	Parramatta.

1862.

East Maitland	Cook*
Bathurst	Camperdown
	Newtown.

1863.

West Maitland	Armidaale
---------------	-----------

1864.

Darlington.

1865.

North Willoughby	Deniliquin
	Morpeth.

1866.

Singleton.

1867.

St. Leonards	East St. Leonards
--------------	-------------------

1868.

Alexandria	North Illawarra
Broughton Creek	Numba

1869.

None.

* Incorporated with Camperdown in 1870.

1870.	
Wagga Wagga.	Forbes
Musclebrook	Ryde
1871.	
West Botany	Lambton
St. Peters	Five Dock
Victoria	Ullmarra
Waratah	Tenterfield
Wickham	Hamilton
Windsor	Petersham
Gerrington	Leichhardt
Broughton Vale	Ashfield
Penrith	Nowra
1872.	
Inverell.	Liverpool
Macdonald Town	Prospect
Glen Innes	Dubbo
Richmond	Hay
1863.	
Hill End.	
1874.	
Wallsend	Ulladulla
Yass	Burwood
1876.	
Gulgong.	

The fact that the number of these municipal bodies incorporated since 1870 is almost as large as that brought into existence during the whole of the previous periods is another significant illustration of the present rapid progress of the Colony.

In 1870, by an act of questionable policy, the contingent of Imperial troops stationed in Australia was ordered home. The withdrawal was a significant hint that for the future the colonists must look after their own land defences. But the Colonies did not grudge payment of the expenses of maintaining their detachments of the regulars; they had expended large sums in fortifications, and had organised considerable bodies of Volunteer rifles and artillery. They had

Volunteer
Force and
Defences.

thus shewn in the most direct way a sense of the duty of internal defence. It appears to us that there should always be a detachment of British troops in this part of the Empire to serve in peace as a standard of discipline; and in war as the backbone of the local forces. The uniform of Old England's soldiers was a popular symbol of our connexion with the Mother Country too valuable to be removed for any but imperative reasons. The effective force of New South Wales on 31st December, 1874, may be classified as follows :—

PAID FORCES.	
Regular Artillery*	108
Naval Brigade	302
VOLUNTEERS.	
Artillery	758
Engineers	97
Rifles	2,597
General Staff	38
Brigade Band.....	36
Total number of officers and men	<u>3,936</u>

Some of the Volunteers are very good shots, and a team of picked marksmen from Victoria and this Colony will compete for Australia against the World at Philadelphia.† Attached to some of the Public Schools there are Cadet Corps, which comprise a total of 9 captains, 1 subaltern, 96 sergeants, and 1,128 rank and file. The idea of associating the leisure of the youth of the Country with exercises so fitted to inspire in their minds a respect for order and a manly and patriotic spirit is a happy one. It might be made to serve some of the most useful purposes of national military training.

* Provision has just been made for a second Battery.

† To-day we learn by cable the performances of the Australian eight at Creedmocr. In the special practice they were only one point behind the Irish team, beating the rest; and in the International match they scored 3,062 points, the Americans scoring 3,126, and the Irish 3,104. As they were within a point of the Scotch, defeating the Canadians, and were not many below the winners, the performance must, all things considered, be regarded as a good one. By a later telegram we learn that in the match in which the riflemen competed individually, Mr. J. J. Slade, of this Colony, won a silver medal, scoring 170 out of a possible 200, and being within three points of the best score.

The fortifications of Sydney have been greatly strengthened during the past few years, upwards of £200,000 having recently been spent upon them. The many elevated points in the harbour and its comparatively narrow course afford every facility for an impregnable line of defence. The pits of the new batteries are hewn out of the rock. The armament chiefly consists of muzzle-loading rifled guns of from 5 to 18 tons; the 18-ton guns throw a shell of 400 lbs. The batteries are—

OUTER LINE OF DEFENCE.

<i>North side.</i>	<i>South side.</i>
Bradley's Head Battery.	Light-house Battery, to seaward.
George's Head Battery.	Lower Light-house Battery.
George's Head Casemate Battery.	Steel Point Battery.
Intermediate Battery.	
Middle Head, Outer Battery.	
Middle Head, Inner Battery.	

INNER LINE OF DEFENCE.

Dawes Point Battery.	Fort Denison.
Fort Macquarie.	"Mrs. Macquarie's Chair" Battery.

A hostile expedition seeking to enter the Heads would do so under a heavy fire, and upon rounding into the fairway would be exposed to a cross and raking fire from no less than nine batteries, commanding a boom to which would be attached torpedoes. A very large stock of war material has been accumulated, valued at from £350,000 to £400,000. The good people of Sydney are determined therefore to give the enemies of Her Majesty a warm reception should they ever visit this corner of her dominions.

New South Wales has already quite an array of charitable Charities. organisations.* Many of the local charities, such as the

* It may be interesting to observe that the voluntary private contributions of our people to the Patriotic Fund for the Crimean widows and orphans, the Indian Mutiny Fund, and the

Cotton Famine Fund, amounted to at least £92,048.—"Industrial Progress of New South Wales," pp. 413-4.

Sydney Infirmary, the Destitute Children's Asylum, the Asylums for the Aged, the Orphan Schools, and the Asylums for the Insane, are very large institutions. The Hospital for the Insane at Gladesville, which is under the superintendence of Dr. Manning, is an example in favour of a kind and liberal system of treatment. At a ball given in the Hospital we saw hundreds of the unfortunate inmates dancing with propriety and evident delight; the guests not shrinking from an active share in the benevolent entertainment. In the interior districts there are fifty hospitals for the sick where many a poor wanderer stricken down by disease has found skilled help and hospitality. It may at first sight appear strange that in a young and rich community the necessity for so many charitable refuges should be felt. But in such communities there is always a large proportion of adventurers, who have no kindred or friends to fall back upon in affliction; and even prosperity itself is an influential cause, for it often leads weak natures into improvidence and excess. Our charity is really needed only for the orphan, the aged, the blind, the maimed, or the sick, although it is no doubt often abused.

Lately our able Governor Sir Hercules Robinson laid the foundation of a new hospital, to be called the "Prince Alfred Hospital." The plans have been prepared after a careful study of recent European improvements. The whole cost will exceed £100,000; accommodation is to be provided for 354 beds. The design was originated by large subscriptions from the colonists, who desired to erect a perpetual memorial of the gratitude of the people of New South Wales for the recovery of the Duke of Edinburgh from the atrocious attempt upon his life whilst the guest of the Colony. The idea of expressing gratitude by an institution which will inspire that sentiment for all time to come in the breasts of the unfortunate was a beneficent one.

The following are the leading Charities :—

- *The Sydney Infirmary and Dispensary.
- *The Benevolent Society of New South Wales.
Home Visiting and Relief Society.
- *Institution for the Deaf, Dumb, and Blind.
Sydney Foundling Hospital.
House of the Good Shepherd.
Discharged Prisoners Aid Society.
- St. Vincent's Hospital.
- Ragged Schools.
- Jewish Ladies' Society.
- Jewish Ladies' Dorcas Society.
- *Society for the relief of Destitute Children.
- †Orphan Schools.
- †Hospital for the Insane, Gladesville.
- †Lunatic Asylum, Parramatta.
Freemason's Orphan Society.
- †Benevolent Asylums for the Aged and Infirm.
Sydney Female Refuge.
Sydney Female Home.
Society for the prevention of Cruelty to Animals.
- †Nautical School Ship for vagrant Boys.
- †Reformatory for Girls.
- †Industrial School for Girls.
- †Institution for Imbeciles, Newcastle.
Soup Kitchen.
Night Refuge and Reformatory.
Asylum for Blind Workers.

There are about one hundred Literary and Scientific Institutions in the Colony, more than one to every 150 adult males of the population. In nearly every township there is a "School of Arts" or a "Literary Institute." The Government subscribes £1 for every £2 raised for the building funds of such institutions, and afterwards gives an endowment equal to half the annual subscriptions. Besides the foregoing, there are—

Scientific and literary institutions, &c.

- The Royal Society of New South Wales.
- The Free Public Library.
- The Academy of Art.
- The Australian Museum.
- The Sydney Mechanics' School of Arts.
- The Acclimatization Society.
- The Agricultural Society of New South Wales.
- The Observatory.
- The Engineering Association of New South Wales.
- The Architects' Association.
- The Linnæan Society.
- The Entomological Society.
- Artists' and Amateurs' Life Academy.
- Horticultural Society of New South Wales.

* Receive Government aid.

† Government Institutions.

The annual exhibitions of the Agricultural Society of New South Wales have done much good. One of the results of its prosperity is that there are now fifteen or twenty similar societies in different parts of the Colony, nearly all of recent date. It is impossible to overrate the importance of such organisations in a country like New South Wales. They provide a standard of excellence in our various industries, and an admirable stimulus to reach it. We may add that a sum has been voted by Parliament towards the formation of a National Gallery of Fine Arts.

Progress and
resources of
the Country
Districts.

At the request of the Commission for the representation of the Colony at Philadelphia, many of the country newspapers published special issues, containing descriptions of their districts. We offer a series of extracts from these accounts, which will give readers at a distance a good outline of the interior of the country. We recognise the value of the extracts as a "cloud of witnesses" testifying from local knowledge to the prosperity and promise which we have endeavoured to describe in general terms. A critic may suspect exaggeration here and there, but no one can resist the chorus of testimony to the progress and resources of this great territory. We may, too, point to the extracts as an illustration of the character of our newspaper Press which all things considered is exceedingly creditable. We have thought it convenient to give in each case the distance of the locality from the metropolis, which is on the coast :—

NEWCASTLE, 75 miles north from Sydney.

Newcastle Chronicle. Within the last five years this city has advanced considerably in the character of its architecture, and fine banking-houses, public buildings, and handsome residences now adorn this town.

WALLSEND, 85 miles north from Sydney.

Miners' Advocate. A large and rapidly increasing town

GRENFELL, 233 miles west from Sydney.

Grenfell Record. Grenfell is rapidly being transformed from a gold field into an agricultural and pastoral settlement. We hope to see Grenfell in a few years one of the most flourishing of our western townships.

YOUNG, 245 miles south from Sydney.

Burrangong Chronicle. The whole town and district is circumferented with thousands of acres taken up under free selection, and for the most part under cultivation with wheat, barley, oats, corn, maize, lucerne, potatoes, and other products. From Young to Wombat, Murrumburrah, Marengo, and the Calaba district, nothing meets the eye but permanent homesteads, settled population, and cultivated soil.

MARENGO, 239 miles south from Sydney.

Burrangong Chronicle. The chief supports of Marengo are the free selectors, many of whom are large landholders, who by uniting farming with grazing are gradually becoming highly prosperous.

BATHURST, 144 miles west from Sydney.

Western Independent. Bathurst boasts of a very large number of wholesale and retail warehouses, many of which consist of magnificent piles of buildings and contain enormous stocks of goods of a description in no way inferior to the best of similar marts in the fashionable parts of great cities of Europe and America, and such as it would only pay merchants to keep in the midst of a wealthy and prosperous district.

NARRABRI, 321 miles north-west from Sydney.

Narrabri Herald. An almost equally great cause of complaint is the scarcity of labour. Good pay, constant employment, cheap living, and the enjoyment of the most robust health await the willing toilers of overcrowded European States. We overlie, geologists tell us, a coal formation, its extent being enormous and supply inexhaustible. It may safely be predicted that a grand future awaits this district. A time will come when the puff of the high pressure engine and the tall chimney smoke shall tell of scores of industries profitably pursued, swelling the exports of this naturally rich and highly blessed portion of one of the brightest gems of the British Crown.

WELLINGTON, 226 miles west from Sydney.

Wellington Gazette. Wellington is perhaps one of the finest agricultural districts in the Colony. Land of almost unsurpassed richness is to be found on every side. Of late years the settlement of the country has wonderfully progressed, and land is now being taken up in all directions. Still there is a vast quantity of land untilled, and in the hands of the Government, which can be purchased on easy terms . . . famous for wool . . . remarkably well adapted for the cultivation of the vine.

GOBOLION, 227 miles west from Sydney.

Wellington Gazette. The land round Gobolion is of the finest description. An idea of its adaptability for wheat-growing will be given when it is stated that a year or two ago 279½ bushels of wheat were obtained from a small paddock of 4 acres.

INVERELL, 354 miles north-west from Sydney.

Inverell Times. It sits almost at the junction of a limited granite formation on the one hand, and a superb basaltic country on the other. The former is rich in the ores of both lode and stream tin, which strange enough was not discovered till about three years ago; whilst the latter forms a diversified oasis of land wealthy in all the capabilities that are prized by the agriculturalist and the pastoralist. The district may confidently anticipate a prosperous future, for it may be epitomized as a great laboratory of cereals and wine, which it were a national impoverishment to devote to sheep-walks could we command the husbandman and vine-dresser to possess it.

Inverell Dispatch. The country is richly diversified, consisting of almost every description of soil, from the richest black and red soil, admirably adapted for wheat and grape culture, to the poorer description of gravelly soil suitable only for grazing purposes.

MUDGEES, 168 miles north-west from Sydney.

Mudgee Times. Mudgee wools have obtained a brilliant reputation all over the world. It is probable that in no part of the Colony is richer land to be found than upon the river flats of the Cudgegong and its tributaries. We believe it will be one of the finest centres of population and industry in the Colony.

ARMIDALE, 313 miles north from Sydney.

Armidale Chronicle. "Throughout the length and breadth of the land the cry is for more labourers."

BURRANGONG, 245 miles south from Sydney.

Burrangong Argus. Land has been and is still being taken up with great rapidity under the free selection Act.

BEGA, 255 miles south of Sydney.

Bega Standard. All have selected, improved, and added to their lands, and the whole country is in every direction studded with homesteads and enclosed by substantial fences. The land is not yet gone by a long way, for each week sees hundreds and at times thousands of acres taken up, and our land office revenue is an important item. Still settlement goes on and the steady tide of prosperity that has set in for this favoured district seems likely to "run into flood" for many years. And we have all we can desire to make it so; splendid grass lands, timbered like an English park, compose the lower country, while in the hills the grass springs as if by magic as the ringing of the timber lets the sun to it. We have our markets, too, close at hand, and our produce can be conveyed by road or steamer in forty-eight hours to the metropolis. There is room for a large influx of population. Good investments await the capitalist and good employment for those whose capital is their labour.

Bega Gazette. And what about the land we live in? Can we find another like it? Can the golden slopes of the Pacific vie with it in salubrity and prolificness? Can Walt. Whitman, Bret Harte, and Mark Twain write

anything descriptive of their land, the actual reality of which cannot be surpassed in sunny Australia? Longfellow may rave about Catawba wine—we will back Albury and Dalwood against Catawba for a trifle; we will pit the Bega maize against anything from 'Frisco to Detroit; we will challenge the whole United States and Yorkshire combined to produce bacon and hams equal to D'Arcy's, A. Allen's, or Ritchie's; and for fat cattle, we do not know that any grazier from Texas to the White Mountains can turn out a mob like White's (of Edinglassie) famous snowies. We have gold, coal, iron, copper, sheep, cattle, God's pure air, and prosperity. Who can have more? Speaking of our own Bega district we can say it is hard to be beaten. If it contains a poor man the fault is his own.

PANBULA, 275 miles south from Sydney.

Bega Standard. Panbula flats, bordering the river of that name, are exceedingly fertile, and nearly forty years' cropping have not diminished their capacity to grow splendid corn.

ORANGE, 180 miles west from Sydney.

Western Advocate. We may add, in conclusion, that from its vast agricultural and mineral resources and its position with regard to the west, Orange is esteemed one of the most rising and thriving townships of the Colony, possessing as it does within itself all the elements that must ultimately make it a large and important centre.

QUEANBEYAN, 189 miles south from Sydney.

Queanbeyan Age. Steady and hopeful as has been its natural growth of population and wealth up to the present period, there is every reason to believe that the district is on the eve of far greater prosperity than it has ever yet enjoyed. . . . The improved roads, increased traffic, and constantly growing population in one of the finest pastoral, agricultural, and mineral districts of New South Wales must make the Queanbeyan or southern portion of the County of Murray continue to be more than ever one of the most thriving districts of the Colony.

MONARO, 260 miles south.

Monaro Mercury. It is an indisputable matter of fact that the district of Monaro is one of the finest in the Colony. . . . Monaro is a favorite resort for horse dealers from Adelaide, and some of the best troop horses ever landed in India have been bred in this district. . . . Gold, copper, tin, silver, and lead are to be got in almost any part of Monaro, though not exactly payable at the present time. . . . Most people believe that great golden treasures are to be found at Kiandra, but the mountains are covered and the gullies filled with snow a greater part of the year.

LIVERPOOL PLAINS, 290 miles north-west from Sydney.

Murrurundi Times. Chiefly occupied in pastoral enterprises, this magnificent tract of country comprises some of the best station properties in the Colony. Free selection is progressing rapidly in all directions. Presenting

both level and mountainous conditions to a very large extent the resources of the district are multiform and well nigh inexhaustible. Every branch of agriculture may be followed with abundant success in the valleys and on the plains, while pastoral interests flourish with unexcelled prosperity. A large agricultural population has been settled on the land, and a very general condition of prosperity prevails. There is a large quantity of silver; gold has been found in various parts of the district, the quartz reef at the Hanging Rock promising payable returns for many years to come. Seams of coal and kerosene shale are known to stretch for miles north and south of Murrurundi. A quantity of coal has already been raised at Warland's Range. Tin, iron, copper, antimony, and other minerals have already been found in the district.

BOURKE, 598 miles west from Sydney.

Central Australian and Bourke Telegraph. The working man in these districts is at a premium, an ordinary pick and shovel man being worth 9s. to 10s. a day, and hard to get at that; whilst carpenters, mechanics, and tradesmen earn about the same salary, if not more, than hundreds of educated men, brilliant perhaps at their respective Universities, but at a discount in Australia. Altogether we may be congratulated upon having a district where poverty is unknown, crime not very frequent, and where any man can by diligence and perseverance secure an independence for himself.

KIAMA, 90 miles south from Sydney.

Kiama Independent. Splendid seams of coal — seaport within a few miles.

DUBBO, 248 miles north-west from Sydney.

Dubbo Advertiser. The soil of the district, aided by a favourable climate, enables our farmers to produce wheat of a description which it is confidently asserted cannot be surpassed in any of the Colonies.

Dubbo Dispatch. The north-west district possesses about a sixth of the entire live stock of New South Wales. There is no country in Australia the superior of the north-west for grazing purposes. In every part of it fine fattening herbage grows abundantly—such as the salt bush, cotton-bush, and other saline herbs, which are not only fattening but extremely healthy—and some of the finest stock to be produced anywhere are bred in the district. The soil generally is of volcanic formation, and red clay loam. On the former the vine grows well, and on the latter wheat is cultivated with success. The climate and soil of the north-west are favourable to the growth of tobacco, cotton, sugar, &c., and it is the favourite dream of some of our enthusiasts that the day will come when the banks of our principal rivers will be great sugar, cotton, and tobacco growing fields. Tropical and semi-tropical fruits grow luxuriantly, and the vine attains a perfection almost marvellous. When the iron-horse traverses our valleys a wealth of copper, iron, and gold, will be produced in the western country. From Mitchell's Creek, Bald Hill, the carboniferous boundary-line bears away towards Cobbora, and then down the right bank of the Talbragar River it may be traversed continuously for

50 or 60 miles to the point we started from. How far it extends in a northerly direction we are not in a position to state with any degree of accuracy.

The labour wants of the north-west are large, and it cannot be said that the supply is equal to the demand.

ILLAWARRA, 70 miles south from Sydney.

Illawarra Banner. Two lines have been surveyed for a railway between Sydney and Wollongong, one of which it is anticipated will be submitted by Government during the next Session of Parliament. With such a railway in existence Illawarra will become one of the largest and most prosperous districts in the Colony. The coal and kerosene shale deposits, which can be so easily worked, must of necessity force the district into manufacturing industries. From Bulli right through the district to beyond Kiama (a distance of 50 or 60 miles) there exists an immense range of mountains, and the very best of coal has been traced right throughout.

TUMUT, 279 miles south from Sydney.

Tumut and Adelong Times. Lying considerably to the south of Sydney, and near the base of a span of the Australian Alps, the climate is mild and agreeable. In winter, although the high hills are covered with snow, none falls on the river flats; the frosts are very bitter too; while in summer the heat very rarely exceeds 90° during the warmest period of the day; and the almost never-failing evening breeze fans with its cool and refreshing breath all living things. As may readily be conceived, the inhabitants of the district are robust. The fertility of our soil is unquestionable. The whole country, including the counties Cowley, Selwyn, Buccleuch, and Wynyard—containing some thousands of square miles—is highly auriferous, besides abounding in other metals, with limestone, and probably coal, which in the future will render this part of New South Wales one of its richest and most populous districts.

ADELONG, 267 miles south from Sydney.

Tumut and Adelong Times. A considerable area of land round Adelong is of good quality, and agriculture and grazing obtain to some extent. This with its large mining interest causes an amount of business to flow into this town which would astonish the denizens of larger and more pretentious places. Probably no district in New South Wales offers such a field for enterprise as the unrivalled copper lodes of the Tumut district. Assays made of the Snowball ore have returned 72 per cent., while the inferior lodes of Brungle have averaged 30 per cent. Tin has also been found. On closing this very imperfect description of our locality, we confidently express a hope that the chronicler of 1895 will have a report to make as far surpassing in evidences of prosperity that we have outlived, as our present state excels that of the aborigines of these Colonies.

HAY, 460 miles south-west from Sydney.

Hay Standard. The town of Hay is, we venture to say, the most thriving and prosperous town in New South Wales at the present time. There is not,

perhaps, in the habitable parts of the globe a country so desirable to live in as Riverina, so free from epidemics, so salubrious, so rich in the necessities and even the luxuries of life, a sky so serene, an atmosphere so pure, and a climate so comfortable. The complaint is general that labourers cannot be had. There are Government works to be done, municipal and private works also, for which no person is offering, though the price promised would tempt many a man who is regarded as well-to-do in the Old Country. We have become so accustomed with prosperity and plenty that we expect them to come in at our doors without our taking the trouble to rise and open them. There can be no doubt about the matter, that there is a great and rich future in store for the territory known as Riverina; and looking at it now, and remembering what it was only a quarter of a century ago, it is a matter of surprise that it should have remained so long unoccupied by European enterprise.

DENILQUIN, 488 miles south-west from Sydney.

Denilquin Chronicle. The district has been much benefited by these settlers (free selectors), but there is room for hundreds of thousands more, as the space between the Murray and Murrumbidgee Rivers includes an area of something like 10,000,000 acres, the greater portion of which is still open for settlement, or being now held back for reserves must shortly become available.

BRAIDWOOD, 186 miles south from Sydney.

Braidwood Dispatch. The remunerative character of our gold fields in times gone by, which has not been surpassed by any other part of the Colony, is likely to be maintained if the district only gets fair play. It is becoming more evident every day, from the discoveries which are from time to time being made, that its auriferous resources are of a more permanent character than they were thought to be a few years since. We have a fine temperate climate owing to the altitude of the district some 3,500 feet above the sea, of which we are within 30 miles by a good road, and all kinds of English grasses and farm produce can be grown here to perfection.

RICHMOND AND TWEED RIVER DISTRICTS, 500 miles north from Sydney.

Richmond River Express. As a whole this part of New South Wales may justly be esteemed one of its most favoured districts. It possesses a healthy climate, and though for a short time during summer the heat may be great, the nights are almost invariably cool and delightful. Sugar, cotton, bananas of several kinds, yams, arrowroot, ginger, passion-fruit, pine-apples, melons, pumpkins, cucumbers, tomatoes, English potatoes, sweet potatoes, New Zealand potatoes (kumeras), earth nuts, chicory, coffee (in sheltered localities), the tea plant, Chinese grass, cloth plant, several varieties of the mulberry, the vine, peaches, nectarines, apricots, the olive, fig, quince, pomegranate, orange, lemon, citron, shaddock, chermoyer, date, loquat, guava, Chinese date palm, jack fruit, paw-paw apple, opium poppy, are grown in the open air, and may be grown to advantage in suitable

localities. The soil is of a chocolate colour, of the richest quality, and admirably adapted for the growth of sugar-cane, many acres of which of different varieties are now under cultivation. The day may not be far distant when the coal and iron in this part of the colony will be utilized. Titaniferous and red oxide of iron of great richness exist in many parts, and coal is found in all the upper districts of the Richmond, frequently of the cannel variety. Antimony, kerosene shale, plumbago, manganese, copper, malachite, meerschaut, are also found. Tin has lately been reported as discovered in the neighbourhood of Drake.

SINGLETON, 123 miles north from Sydney.

Singleton Argus. There are large coal fields in the neighbourhood, one bed of coal at Rix's Creek, about 3 miles from town, having been profitably worked, though on a small scale, for some years. We have at various times seen rich specimens of iron ore found in the immediate neighbourhood of the town. Copper ore too has been found in the Bulga Range some 10 miles distant. There is a river with a never failing supply of water, and coal in abundance, all the elements of prosperity in manufacturing. In the centre of one of the finest districts in the world, and with a railway passing the town, no place could be better suited to woollen manufactures than Singleton.

GLEN INNES, 373 miles north from Sydney.

Glen Innes Examiner. The district abounds in rich tin lodes, which however require time and capital for their profitable development. The district is rich in fine agricultural lands, and is suitable for the growth of wheat, corn, oats, potatoes, and garden produce. The climate is like that of England, and though situated near the tropics the inhabitants of the district have during the winter season many opportunities of indulging in the pastime of "snowballing." Taking into consideration the immense mineral wealth of this district, its pastoral and agricultural capabilities, and its many advantages of climate and healthy invigorating air, it is safe to predict that Glen Innes, as the capital of Central New England, is destined to become the foremost town in New England.

COOMA, 259 miles south from Sydney.

Cooma Gazette. In the space of a short column, or possibly two, it would be impossible to do justice to the beauties and physical features of that part of the district of Monaro which is now to be described. A tract of country as varied in its resources as in its climate, as large as two or three English counties, irrigated by rivers which, rising within its boundaries, discharge their waters into different oceans hundreds of miles apart, teeming with mineral wealth, with stores of iron, gold, copper, tin, lead, silver, with limestone, shale, and sandstone, which require but population to develop their untold wealth: such a country cannot be described in the brief space allotted to a newspaper article. . . . The Cooma district has within the last twenty years made extraordinary advances in material progress.

perhaps, in the habitable parts of the globe a country so *de*
 as Riverina, so free from epidemics, so salubrious, so *ric*
 and even the luxuries of life, a sky so serene, an *atmo*
 climate so comfortable. The complaint is general
 had. There are Government works to be done, *r*
 also, for which no person is offering, though *th*
 many a man who is regarded as well-to-do
 become so accustomed with prosperity
 to come in at our doors without our
 them. There can be no doubt about
 rich future in store for the *terri*
 now, and remembering what
 matter of surprise that it
 European enterprise.

which
 rare, and
 farmers, and
 all produce are

from Sydney.

River from its
 and its healthy clim
 ulation than any par
 es of the tablelands of N
 arling Downs in the north
 g into the Pacific in latitud
 The area of the Clarence River
 miles. The lands on the banks of the

DENILLY

Deniliquin C'
 settlers (free or
 as the space
 of some
 open f
 been

as the large islands which stud its estuary,
 alluvial soil, with a subsoil pervious to water
 being what is known as cedar-brush, alluvial flats, and
 adapted for the growth of sugar-cane, maize, oranges,
 cotton, pine-apples, silk, arrowroot, tobacco, and similar
 The principal exports from the
 are sugar and maize. On the alluvial belts bordering the river the
 vegetation has nearly altogether disappeared under the axe of
 the farmer, and luxuriant crops of maize, sugar, and other semi-tropical
 products are now flourishing and yielding large profits. The fertile soil has
 the advantage of a peculiarly genial climate, which stimulates its productive
 qualities in an extraordinary degree. As high as 80 and 100 bushels of
 maize is not uncommon, and the sugar-cane produces from 2 to 3 tons of
 sugar to the acre. Some 6,000 tons of sugar, besides rum, were produced
 last year on the Clarence alone. Tobacco is also grown, the soil and
 climate being very favourable to the plant. Cotton thrives very well, but is
 not grown, owing to the high wages and scarcity of suitable labour. Arrow-
 root is produced, and some quantity of very good quality finds a very ready
 market. Nearly all European fruits are produced, as well as those of the
 semi-tropical *habitat*. The vine does remarkably well, and some good wine
 is made, principally by German colonists. As a pastoral district the Clarence
 is celebrated for its fine cattle and horses, of which there are large numbers.

TAMWORTH, 251 miles north from Sydney.

Tamworth News. The soil is generally rich and deep, capable of pro-
 ducing any description of crop if the climate were somewhat more certain.
 The Valley of Dungowan has deservedly acquired a pre-eminence for the
 luxuriance and extent of its capabilities. Wheat grown there has been found
 to weigh as much as 66 or 67 pounds per bushel an acre, and the land
 frequently yields 40 and even 50 bushels an acre. The large extent of open
 and wooded plains constitutes the remainder of the district, and is occupied
 by some of the wealthiest squatters in the Colony, with vast flocks and herds.

SHOALHAVEN, 115 miles south from Sydney.

Shoalhaven News. The lands immediately adjacent to Terrara, which are considered the finest in the world, are thickly occupied by farmers, and it is here where some of the largest yields of agricultural produce are attained.

CLARENCE RIVER DISTRICT, 300 miles north from Sydney.

Clarence and Richmond Express. The Clarence River from its size, navigable capacity, the fertility of soil on its banks, and its healthy climate, is better adapted for the support of a dense population than any part of New South Wales. It drains all the eastern slopes of the tablelands of New England from Armidale in the South to the Darling Downs in the north—a distance of more than two degrees—falling into the Pacific in latitude $29^{\circ} 25'$ south, and longitude $153^{\circ} 25'$ east. The area of the Clarence River district is computed to be fully 6,500 miles. The lands on the banks of the lower part of the river, as well as the large islands which stud its estuary, consist principally of rich alluvial soil, with a subsoil pervious to water and easily cultivated, being what is known as cedar-brush, alluvial flats, and swamps, eminently adapted for the growth of sugar-cane, maize, oranges, bananas, vines, figs, cotton, pine-apples, silk, arrowroot, tobacco, and similar semi-tropical plants. . . . The principal exports from the Clarence are sugar and maize. On the alluvial belts bordering the river the indigenous vegetation has nearly altogether disappeared under the axe of the farmer, and luxuriant crops of maize, sugar, and other semi-tropical products are now flourishing and yielding large profits. The fertile soil has the advantage of a peculiarly genial climate, which stimulates its productive qualities in an extraordinary degree. As high as 80 and 100 bushels of maize is not uncommon, and the sugar-cane produces from 2 to 3 tons of sugar to the acre. Some 6,000 tons of sugar, besides rum, were produced last year on the Clarence alone. Tobacco is also grown, the soil and climate being very favourable to the plant. Cotton thrives very well, but is not grown, owing to the high wages and scarcity of suitable labour. Arrowroot is produced, and some quantity of very good quality finds a very ready market. Nearly all European fruits are produced, as well as those of the semi-tropical *habitat*. The vine does remarkably well, and some good wine is made, principally by German colonists. As a pastoral district the Clarence is celebrated for its fine cattle and horses, of which there are large numbers.

TAMWORTH, 251 miles north from Sydney.

Tamworth News. The soil is generally rich and deep, capable of producing any description of crop if the climate were somewhat more certain. The Valley of Dungowan has deservedly acquired a pre-eminence for the luxuriance and extent of its capabilities. Wheat grown there has been found to weigh as much as 66 or 67 pounds per bushel an acre, and the land frequently yields 40 and even 50 bushels an acre. The large extent of open and wooded plains constitutes the remainder of the district, and is occupied by some of the wealthiest squatters in the Colony, with vast flocks and herds.

FORBES, 239 miles south-west from Sydney.

Forbes Times. With a stream of beautiful running water, and an unfathomed depth of soil, rich in all the elements requisite for successful culture, some were determined to produce what had been declared an impossibility, and right royally did the virgin soil yield its increase. From that time to the present there has been no lack of those indispensable adjuncts which grace alike the tables of the rich and poor, and which contribute to the health as well as to the enjoyment of mankind. As years rolled by those who were determined to make Forbes their homes saw a better state of things than that which followed its decay as a mining township. Under the provisions of the "Land Act of 1861," numbers availed themselves of the opportunity of finally settling upon homesteads which they could call their own . . . and to-day there are few inland towns in New South Wales which have a more hopeful future than Forbes.

BOMBALA, 312 miles south from Sydney.

Bombala Herald. At present, however, let us rejoice and be thankful that Bombala exhibits all the signs of a rapidly increasing prosperity that is too generally spread for a few individual misfortunes to gainsay.

YASS, 189 miles south-west from Sydney.

Yass Courier. The general agricultural character of the district may be defined as cereal and vine-growing. The principal crop is the wheat one. Wheat does well in almost any situation and soil, the climate of the district suiting it admirably. All English fruits grow luxuriantly in the district.

There is a great scarcity of skilled labour in the Yass district. Persons desirous of building find great difficulty in getting contractors to tender, and this, notwithstanding that first-rate lime, good building stone, and the very best clay for bricks, are easily procurable in the district.

GUNDAGAI, 251 miles south-west from Sydney.

Gundagai Times. As some indication of the rapidity with which this district is being occupied, we may record that a recent Government return shows that for the years 1862-1865 there were conditionally purchased under the Crown Lands Alienation Act of 1861, 221 lots, the joint acreage of which was 22,382 acres, and during the years 1871-74, 2,296 lots were taken up, the acreage being 187,541 acres.

GRAFTON, 301 miles north of Sydney.

Grafton Argus. The high prices that centrally situated and suitable lots of land in this city are bringing, notwithstanding the absence of anything having the semblance of a "rush," or any immediate prospect of the place being advanced by extraordinary circumstances, is, we think, sufficient evidence that Grafton (and indeed the whole of the district, for the city can prosper only in proportion to the advance of the district) is destined to become one of the most important towns in the northern portion of this Colony.

The Metro-
polis.

We could wish an abler pen to undertake a description of the chief city of the Colony, the seat of the first Australian settlement, and without doubt the most beautiful and attractive locality in this hemisphere. The bays of Port Jackson afford magnificent water frontages ; and the irregular elevations upon which the city and its suburbs are built allow of many grand and some unequalled views. Sydney usually wears a staid and tranquil air, befitting the mother of Southern civilisation. Even the streets have an old world look ; and business is transacted without that feverish bustle which characterises the thoroughfares of Melbourne. In the latter city everybody is busy, or catches the infection and desires to be. In the former the stranger feels quite at home. Nature has surrounded the citizens of Sydney with so many facilities for cheap enjoyment that even hard times do not check the prevailing temperament. The only time when we can boast of a really bustling population is on a public holiday. On such an occasion there are moored at the Circular Quay steamers of all sizes with flaming placards on which appear the names of the favourite watering-places, and the host of attractions they offer for the day. For miles in different directions there are troops of humanity, mostly of the humbler classes, all well dressed, hastening towards the steamers ; each little group dividing burdens which suggest many a festive gathering on the green slopes or beneath the shady cliffs of the neighbouring bays. We dare affirm that nowhere on this planet can a scene so truly joyous be witnessed, bright as only an Australian sky can make it. The cynic, as he thinks of the jaded crowds which evening will drive back, may laugh at the enthusiasm with which the race of pleasure is begun ; the economist may grudge the seeming waste of time, energy, and money ; but neither can be blind to the prosperity which has clothed these shopmen and artisans and their families in such comfortable attire, and filled their baskets with repasts that would be good enough for their betters in other countries. It must not be

supposed, however, that our people are not industrious because they do not drudge. If there are more holidays and picnics in Sydney than in any other Australian city there are larger shops and manufactories and bigger deposits in the Banks.

Just as there can be no doubt about the prosperity, so there can be none about the rapid growth of Sydney, as shewn in the unabated demand for houses and the activity in the building trades. In the business parts of the city spacious warehouses in elaborate styles of architecture have been erected, with a storage capacity ranging up to 16,000 tons. The erection of factories, a splendid theatre, a cathedral, a synagogue, public offices, stores, shops, and a legion of villas in the suburbs, has cast upon the building trades a quantity of work which they cannot well overtake. In every direction new walls meet the eye. A leading auctioneer reports to us:—

“Vacant land in the city is becoming a thing of the past; the few lots offered within the past five years have been transferred at fully 50 to 100 per cent. in excess of prices ruling prior to 1870. In some streets land covered with habitable though old-fashioned dwellings has realised an advance of fully 100 per cent., the buildings being merely reckoned as so much old material to be removed.”

Sydney has its full share of business corporations. There are ten Banks; five of these have their head offices in this city. The three most important are local institutions, with upwards of 230 branches in the Colonies. The following figures will give an idea of the position of our Banking interest:—

Banks and
Public Com-
panies.

Bank.	Liabilities.	Assets.	Capital paid up.	Rate of last Dividend.	Reserved Profits.
	£	£	£		£
Bank of New South Wales ...	5,656,371	7,092,559	1,000,000	15 % 2½ % bonus	393,333
Commercial	3,940,543	4,894,085	500,000	25 %	373,782
Australian Joint Stock	1,907,617	2,516,704	500,000	8 % and bonus.	88,558
Australasia	830,407	912,024	1,200,000	12½ %	374,119
Union of Australia	607,256	427,436*	1,250,000	16 %	506,992
London Chartered of Australia	248,854	340,944	1,000,000	8 %	168,917
English, Scottish, and Australia Chartered	380,721	533,908	600,000	8 %	67,500
Oriental Chartered	918,755	1,112,650	1,500,000	12 %	500,000
City	802,491	1,061,949	240,000	8 %	7,756
Mercantile	562,880	764,107	160,000	12½ %	45,700
£	15,855,895	19,656,366	7,950,000		

* The assets in the Colony—not the total assets of the Bank.

The following comparison describes the accumulation of capital in this Colony :—

BANK DEPOSITS.

At 31 March, 1858	£4,251,673
„ 1867	6,128,836
„ 1876	14,542,868

The year 1867 shews an advance of 44 per cent. on 1858, but 1876 an advance of no less than 137 per cent. on 1867! To prove that the increase in the wealth of the population is not confined to the middle and upper classes, we proceed to state the growth of Savings Bank Deposits :—

SAVINGS' BANK DEPOSITS.

		Number of Depositors.
31 December, 1857 (one Bank)	£635,040	11,224
„ 1866 (one Bank)	707,815	17,576
„ 1875 (two Banks)	1,649,871	40,957

Nothing could be more satisfactory than the increase under this head of 133 per cent. over 1866 in the amount of savings deposited, and the same increase in the number of depositors. Sydney has a very fair share of public Companies, as the subjoined summary will suggest. In comparing the number of Companies in 1866 with those in 1875, another illustration of the advance of New South Wales is gained :—

	1866.	1875.
Fire, Marine, and Life	30	50
Steam Navigation	5	5
Building and Benefit Societies	4	16
Gas, Meat-preserving, and Investment	2	20
Mining—		
Coal	6	13
Copper	1	21
Gold	2	81*
Tin	0	30
Antimony	0	1
Iron	0	2
Kerosene Shale and Oil	0	1
	50	240

* Many of these were "bubble" Companies and have since collapsed.

The more modern public buildings of Sydney are massive edifices, of workmanship not surpassed in the Mother Country. In the neighborhood there is abundance of sandstone, beautiful in colour, easily worked and yet most durable. In this respect we have the advantage of other Australian cities. The most noticeable buildings are:—

Public
Buildings.

	Style of Architecture.
Sydney University*	15th Century, Gothic, in stone.
St. Paul's College	14th do.
St. John's College	do.
Episcopal Cathedral	do.
Australian Museum.....	Roman.
Exchange	do.
Town Hall	Italian, modern.
Post Office	Venetian and Florentine Italian.
Theatre Royal	
Bank of New South Wales ...	Florentine.
Commercial Bank	Roman.
English and Scottish Bank.....	Florentine.
Bank of Australasia.....	do.
London Chartered Bank.....	Italian.
City Bank.....	do. modern.
Oriental Bank	Greek.
Exhibition Building	Paxtonian.
St. George's Church	14th Century, Gothic, in stone.
St. John's Church	do.
St. Phillip's Church.....	do.

IN PROGRESS.

St. Mary's Cathedral	14th Century, Gothic, in stone.
Synagogue	Byzantine.
Colonial Secretary's Office.....	Italian.
The Lands Office	do.
St. Andrew's College	Tudor.
Prince Alfred Hospital	Italian.

It has been estimated by a leading architect that contracts for other buildings have been taken during the last three years to the amount of one million sterling. Amongst

* The Great Hall has recently been paved with marble, obtained from quarries on the Great Southern and Great Western Railways. Of the hall Mr. Trollope writes:—"I think no one will dispute the assertion when I say that the College Hall is the finest chamber in the

Colonies. If I were to say that no College either at Oxford or Cambridge possesses so fine a one, I might perhaps be contradicted. I certainly remember none of which the proportions are so good."—*Australia and New Zealand*, vol. 1, p. 229.

business premises the following are conspicuous :—A block of five warehouses and stores in Pitt-street, in the Gothic style, floors of Colonial timber, with a storage capacity of about 16,000 tons, occupied by Messrs. Newton Brothers and others; three warehouses in York-street in a bold Italian style, with a storage capacity of 10,000 tons, occupied by Messrs. John Frazer and Company; stores extending from O'Connell to Spring streets, capacity about 11,000 tons, occupied by the same firm and Mason Brothers; Bradley, Newton, and Lamb's auction rooms, fronting same streets, with a capacity of 10,000 tons; additions to Sydney Exchange; extension of the Gas Company's Works, costing £30,000; a building of 11 stories for the Colonial Sugar Refining Company; additions to the Union Club, to cost about £7,000; a row of warehouses in York-street; offices in Bridge-street; and many others which we cannot stop to describe.

Public
Gardens and
Parks.

The metropolis possesses Public Gardens and Parks conveniently situated. The following is a list of them :—

The Botanic Garden.....	38 acres.
The Outer Domain*.....	82 „
Hyde Park.....	49 „
Belmore Park.....	10 „
Prince Alfred Park	18 „ 3 roods.
Moore Park†	490 „
Observatory Reserve.....	8 „ 2 roods.
Victoria Park‡	26 „

The Domain has a western frontage to one of the principal streets, and an eastern and northern frontage to the harbour. Hyde Park is in the heart of the city. The Botanic Gardens are the oldest and contain the most varied and valuable collection of plants in the Colonies. They are bordered by one of the prettiest coves in Port Jackson, opposite the

* The Inner Domain, which surrounds Government House, contains 56 acres.

† Adjoining Moore Park there is a water reserve of 768 acres, which will probably become a series of public parks when a new source of supply is adopted.

‡ The University and College reserves which adjoin Victoria Park contain an area of 126 acres.

moorings of the vessels of war, and afford at the distance of a few hundred yards from the principal thoroughfares one of the most pleasant retreats it is possible to conceive. There the rambler finds himself in a maze of secluded paths and bowers, through which there are glimpses of the matchless tints of sky and water. The pride with which the native born regard Sydney may be excused when even the passing visitor acknowledges the capital of New South Wales to be "one of those places which a man who leaves it knowing he will never return, can never leave without a pang or a tear. Such is its loveliness."*

The Census, taken in February, 1871, disclosed the fact that there was settled in Sydney and its suburbs a population of 136,483 souls. Since that date the number of houses erected and the increasing demand for dwellings lead us to believe that the total must be now 165,000; at the rate of the preceding decade it would be 158,000. The following figures shew the number of the inhabitants at the times specified :—

1841	29,973
1851	58,993
1861	93,686
1871	136,483
1875 (say)	165,000

The population within a radius of a few miles from the centre of this city is now as numerous as that settled upon the whole continent thirty-five years ago. The wealth of the Colony is shewn by the proportion of the people settled in the metropolitan district, which is about 27 per cent. of the whole population. Although London is the most populous city in the world it would have to increase its 4,000,000 souls to 8,000,000 to bear the same ratio to the

* Mr. Anthony Trollope, in his work on *Australia and New Zealand*, at page 213, vol. I. Speaking of the Gardens, Mr. Trollope declares: "For loveliness, and that beauty which can be

appreciated by the ignorant as well as the learned, the Sydney Gardens are unrivalled by any that I have seen."—P. 214.

inhabitants of the Mother Country which Sydney bears to those of New South Wales ! The following are the principal suburbs :—

With water frontage.	Other.
Glebe	Surry Hills
Pymont	Paddington
Balmain	Woollahra
North Shore	Waverley
Woolloomooloo	Randwick
Double Bay	Waterloo
Watson's Bay	Redfern
Manly Beach	Chippendale
Bondi	Newtown
Coogee	Petersham
Hunter's Hill	Ashfield.
Gladesville	Burwood
Ryde	

The Harbour
of Sydney.

That fluent master of the English language whose appreciation of Sydney we have just quoted confessed his despair when called upon to give his readers an idea of the beauties of the harbour. These are his words :—

“ I despair of being able to convey to my readers my own idea of the beauty of Sydney harbour. I have seen nothing equal to it in the way of land-locked sea scenery, nothing second to it : Dublin Bay, the Bay of Spezzia, New York, and the Cove of Cork, are all picturesquely fine—Bantry Bay, with the little nooks of sea running up to Glengarry is very lovely,—but they are not equal to Sydney harbour, either in shape, colour, or variety. I have never seen Naples, Rio Janeiro, or Lisbon ; but from descriptions and pictures I am led to think that none of them can possess such a world of loveliness as lies in Sydney harbour.”*

When the writer of fifty novels finds words fail him the author of these pages may stand excused. We may, however, observe that the conformation of the port is as likely to arouse admiration in the mind of the man of trade. If the reader can imagine a sheltered sea transformed into a broad and winding river, diversified by capacious bays, and a succession of promontories, he needs no better outline of Port Jackson.† Dull indeed would be the

* *Australia and New Zealand*, page 20.

† We are pleased to be able to present to our readers a view of a portion of the harbour and the city. Since it was taken (1870) several

flourishing suburbs have risen on the foreground, which is known as the North Shore.

gaze that could wander over that magnificent harbour and its doubly land-locked basins with frontages to the streets, without perceiving its unrivalled advantages for commerce; or rest upon its interior reaches, already dotted with docks and manufactories, without realising its favourable position for manufactures. Nature at least will pardon us, if we predict that this noblest of ocean's daughters will become the mother of prosperous fleets, and the city spreading along her shores the metropolis of the Australias.

Having compiled a summary of the progress of the Colony during the first six years of the present decade, we ventured to compare it with the statistics of Victoria, the more populous and considered the more enterprising of the two Colonies. The result shews what strides New South Wales is making. We may explain that the figures are taken from official publications, and are therefore authentic. The following is the summary:—

The progress
of New South
Wales and Vic-
toria compared.

	POPULATION.		
	1870.	1875.	Increase.
New South Wales.....	502,861	606,652	20½ per cent.
Victoria	726,599	823,449	13 per cent.

	REVENUE.		
New South Wales.....	£2,102,697	£4,126,303*	96 per cent.
Victoria	3,261,883	4,215,524	30 per cent.

	EXPORTS.—OWN PRODUCE OR MANUFACTURE.		
New South Wales.....	£6,267,729	£11,494,549	83 per cent.
Victoria	9,103,323	10,571,806	16 per cent.

	SHIPPING.		
	Tons.	Tons.	
New South Wales	1,461,762	2,168,187	48 per cent.
Victoria	1,344,862	1,673,885	25 per cent.

* Taxation only £1 18s. 3d. per head. The revenue of New South Wales for the year ended 30th September, 1876, reached the sum of £4,759,500!

LAND SALES.

	Acres.	Acres.	
New South Wales	423,691	2,814,000	564 per cent.
Victoria	337,507	418,561	24 per cent.

BANK DEPOSITS.*

New South Wales ..	£6,107,999	£13,650,892	123 per cent.
Victoria	10,899,026	13,734,967	26 per cent.

Statistics of
Great Britain
and New South
Wales
compared.

It may be interesting to compare the statistics of Great Britain with those of the Colony, in land, revenue, commerce, export of home produce and manufactures, shipping, minerals, and live stock. The only possible basis of comparison is population. The figures are for 1874 :—

Population.

Great Britain and Ireland..	32,412,010
New South Wales	584,278

Area.

	Acres.	Per head.
Great Britain and Ireland..	77,828,829	2½ acres.
New South Wales	207,000,000	354 „

Revenue Proper.

	£	£	s.	d.
Great Britain and Ireland..	74,921,873	2	6	3
New South Wales	3,514,314	6	0	0

Commerce.

Great Britain and Ireland..	667,733,165	20	12	0
New South Wales	23,639,342	40	9	2

Export of own Produce and Manufactures.

Great Britain and Ireland..	239,558,121	7	7	10
New South Wales	10,089,039	17	5	4

Shipping Entered and Cleared.

	Tons.	Tons.
Great Britain and Ireland..	45,428,957	1½
New South Wales	1,990,894	3½

* Exclusive of Saving Banks, whose total deposits are about the same.

Value of Minerals raised.

	£	£	s.	d.
Great Britain and Ireland....	67,834,313	2	1	10
New South Wales	2,488,310	4	5	2

Live Stock.

(Horses, Cattle, Sheep, and Pigs.)

Number.

Great Britain and Ireland....	51,209,302
New South Wales	26,296,230

That New South Wales should have already surpassed the Mother Country in the averages of commerce and shipping is a fine evidence of the success of Anglo-Saxon colonisation in these distant lands.

The reader who has followed this description of the condition, resources, and prospects of New South Wales will be prepared to learn that the position of labour in this country is a fortunate one. In the first place, since every adult male is a free and independent elector the masses enjoy the prestige attached to political power. Some may pronounce manhood suffrage a mistake, but none can deny that the electoral body has discovered a soundness of principle and fairness of spirit worthy of admiration. If it went astray it was because it had been misled. There is, as a rule, none of that envy of wealth, and craving for class legislation, which animate a lower type of democracy. When we aver that there is no better dressed or behaved crowd than a Sydney one, we say what any one who has seen a public assemblage in this city will endorse. There may be some countries where wages are higher, others where living is as cheap or the climate is as favourable, but there is none where those who live by the sweat of their brows can realise so nearly as in New South Wales the paradise of their class, we mean the union of high wages with short hours, good

The position
and advantages
of labour in
New South
Wales.

living, and fine weather. The Colony, it is true, is distant from the great seats of manufacture, but a Free Trade tariff, low freights, quick transit, and liberal discounts, enable the merchants of Sydney to land most of the articles of commerce at their selling prices in the places of shipment. What flour we must import can be procured from an adjacent Colony, whom it pays to send wheat to England. The tea, coffee, and rice ports of the East are far nearer Port Jackson than they are to the ports of Europe. As for animal food, our live stock statistics speak for themselves. We have vast stores of coal in plain, valley and mountain, and along the coast. We are making sugar, rum, wine, beer, and tobacco at minimum prices. With the exception of three-pence a pound upon his tea, and if he prefer foreign sugar, three farthings a pound upon that, there are no duties of Customs which the workman must pay out of his earnings upon the necessaries of life. Unless, therefore, he drinks tea and insists upon mixing foreign sugar with it, he is not forced to contribute a single penny towards the expenses of the State. In matters of wages, rents, and prices, something more than mere assertion is needed to satisfy readers at a distance. Feeling that, we have at some trouble compiled from particulars furnished to us by undoubted authorities, a statement of current wages, hours of labour, prices, and rents, upon which an accurate judgment can be formed. It is impossible to include all the details in a work of this kind, but the chief articles are given, and they will suggest a fair criterion for the rest. It is right to state that the present prices of all kinds of meat, and especially of butter, milk, eggs, and potatoes, are greatly higher than they usually are, owing to the effects of a season the driest for many years. An abundant supply of rain has, however, lately fallen in nearly all the districts of the Colony.

IN THE METROPOLIS.

WAGES.

Occupation.	Hours of labour.				Wages per day.
<i>Building trades.</i>					
Carpenters and joiners	8	...	8s. to 10s.
Bricklayers	8	...	10s. „ 11s.
Stonemasons	8	...	10s. „ 11s.
Plasterers	8	...	10s. „ 11s.
Painters	8	...	8s. „ 9s.
Plumbers and gasfitters	8	...	9s. „ 10s.
Shinglers and slaters	any	...	...	4s. „ 6s., per square of 100 ft.
Excavating labourers	10	...	6s. „ 7s.
Brickmakers' labourers	8	...	8s. „ 10s.
Plasterers' labourers	8	...	7s. „ 9s.
<i>Iron trades.</i>					
Fitters and turners	8	...	8s. „ 10s. 8d.
Boiler-makers	8	...	8s. „ 12s.
Pattern-makers	8	...	8s. „ 10s. 8d.
Blacksmiths	8	...	8s. „ 12s.
Coppersmiths	8	...	10s. „ 12s.
Iron-moulders	8	...	8s. „ 10s.
Iron-trade labourers	8	...	5s. „ 7s.
Brass-founders	8	...	10s. „ 12s. 6d.
Shipwrights	8	...	11s. „ 12s.
<i>Carriage trades.</i>					
					per week.
Wheel-makers	8 to 10	...	35s. „ 65s.
Body-makers	„	...	35s. „ 65s.
Trimmers	„	...	40s. „ 60s.
Painters	„	...	40s. „ 60s.
Smiths	„	...	35s. „ 70s.
<i>Leather trades.</i>					
Bootmakers	9 to 10	...	36s. „ 70s.
Boot-finishers	10 „ 13	...	36s. „ 70s.
Tanners	8½ „ 10	...	36s. „ 40s.
Curriers	8½ „ 9	...	63s.
<i>General.</i>					
Saddlers	piecework	...	50s.
Tailors	„	...	60s. „ 100s.
Drapers' assistants	8*	...	40s. „ 100s.

* Half-holiday on Saturday in the large shops.

WAGES—continued.

Occupation.	Hours of labour.					Wages per week.
<i>General—continued.</i>						
Grocers' assistants	15s. to 50s.*
Milliners' do.	15s. „ 50s.
Barbers' do.	20s. „ 60s.*
Ostlers	40s.†
Coachmen	40s.
Waiters	15s. to 30s.†
Cooks	16s.†
Laundresses	16s.†
Housemaids	12s.†
General servants	10s. to 16s.†
						Per day.
Labourers, ordinary	8	...	...	8s.
„ wharf	8	...	...	8s.

RENTS OF COTTAGES FOR MECHANICS.

N.B.—All taxes paid by landlord.

In the City :—

						Per week.
House of 3 rooms ...	...	...	...	...	...	7s. to 12s.
„ 4 „ ...	...	...	...	...	...	10s. „ 15s.
„ 5 „ ...	...	...	...	...	...	12s. „ 17s.
„ 6 „ ...	...	...	...	...	...	14s. „ 20s.

One or two miles from the City :—

House of 3 rooms ...	...	...	...	...	...	5s. to 7s.
„ 4 „ ...	...	...	...	...	...	6s. „ 9s.
„ 5 „ ...	...	...	...	...	...	8s. „ 12s.
„ 6 „ ...	...	...	...	...	...	12s. „ 15s.

Three miles from the City :—

House of 3 rooms ...	...	...	...	...	...	4s. to 6s.
„ 4 „ ...	...	...	...	...	...	5s. „ 7s.
„ 5 „ ...	...	...	...	...	...	7s. „ 10s.
„ 6 „ ...	...	...	...	...	...	10s. „ 14s.

* With board, and sometimes lodging.

† With board and perquisites.

‡ With board and lodging.

PRICES.

Beef, per lb.	...	...	...	...	4d.
Mutton „	...	...	...	...	3½d.
Corned beef, per lb.	...	...	...	...	3½d.
Pork „	...	...	...	...	6d.
Bacon „	...	...	...	...	1s.
Cheese „	...	...	...	...	1s.
Flour „	...	...	...	...	1½d.
Bread „	...	...	...	...	1½d.
Sugar „	...	...	...	...	3d. to 4d.
Tea „	...	...	...	...	1s. 6d. to 2s. 6d.
Coffee „	...	...	...	...	1s. to 1s. 6d.
Butter „	...	...	...	...	2s.
Milk, per quart...	...	...	...	...	8d.
Rice, per lb.	...	...	...	...	3d.
Oatmeal, per lb.	...	...	...	...	3d.
Candles „	...	...	...	...	5d.
Kerosene oil, per quart	...	...	...	...	8d.
Tobacco, per lb.	...	...	...	...	3s. to 5s.
Beer (English), per pint	...	...	...	...	6d.
Do. (Colonial) „	...	...	...	...	3d.
Rum „	...	...	...	...	2s.
Brandy „	...	...	...	...	2s.
Gin „	...	...	...	...	2s.
Prints, per yard	...	...	...	...	4½d.
Calico „	...	...	...	...	6d.
Mole trousers, per pair	...	...	...	...	7s. 6d.
Rough jackets, each	...	...	...	...	15s.
Twilled shirts, „	...	...	...	...	2s. 11d.
Men's boots, per pair	...	...	...	...	5s. 6d. to 9s.
Women's boots, per pair, from	...	...	...	...	6s.
Children's boots, per pair	...	...	...	...	4s. to 4s. 6d.

MINING INDUSTRY IN THE INTERIOR.

Occupation.	Hours of Labour.			Wages per day.
Gold mines	...	8	...	7s. 6d. to 8s. 4d.
Coal „	...	5*	...	9s. 5d.
Copper „	...	8	...	8s. 4d. to 10s. 10d.
Tin „	...	8	...	7s. to 8s. 4d.
Iron „	...	9	...	7s. to 14s.

* Average all the year round. The miners receive 5s. a ton for hewing. When the mine is in full work the average earnings are 15s. a day. It is right to state that the coal miners complain just now of slackness of employment.

TOWNS IN THE INTERIOR.—WAGES.

Occupation.	Hours of Labour.	Young, 215 miles S. from Sydney.	Albury, 351 miles S. from Sydney.	Maitland, 95 miles W. from Sydney.	Goulburn, 134 miles S. from Sydney.	Bathurst, 144 miles W. from Sydney.	Mudgee, 168 miles N.W. from Sydney.	Armidale, 213 miles N. from Sydney.
Carpenters (wages per day) ...	8	s. d. 12 0 ^b	s. d. 10 0	s. d. 9 0 to 10 0	s. d. 12 0 ^d	s. d. 11 0	s. d. 9 0 to 12 0	s. d. 10 0 ^d
Bricklayers do. ...	8	12 0	12 0	11 0 ^b 13 0	10 0	11 0	10 0 ^b 12 0	12 0 ^d
Masons do. ...	8	12 0	12 0 to 14 0	10 0 ^b 12 0	12 0	11 0	12 0 ^b 14 0	12 0 ^d
Blacksmiths do. ...	8	10 0	10 0 ^b 11 8	8 0 ^b 12 0 ^b	8 4 to 11 8	11 0 ^d	10 0 ^b 12 0	10 0 ^d
Saddlers do. (piece work) ...	...	10 0	6 9 ^b 11 8	6 8 ^b 10 0	5 0 ^b 8 4	9 0	7 9 ^b 13 4	10 0 ^d
Shoemakers do. ...	...	9 0 ^d	8 4 ^b 19 0	7 6 ^b 10 0 ^b	6 8 ^b 13 4	7 0 to 13 0	6 0 ^b 8 4	11 8 to 16 8
Tailors do. ...	...	10 0 ^d	7 6	11 0 ^b 12 0	6 8 ^b 13 4	10 0	6 0 ^b 9 0	11 8
Labourers do. ...	10	8 0	6 0 to 8 0	6 0 ^b 7 0 ^c	6 0 ^b 8 0 ^d	8 0	7 0 ^b 9 0	6 0
Milliners' Assistants (wages per week) ...	10	60 0 ^e	40 0 ^b 60 0	30 0 ^b 40 0 ^c	20 0 ^b 50 1 ^e	42 0	29 0 ^b 37 0 ^c	20 0
Drapers' do. ...	10	60 0 ^e	60 0 ^b 80 0	30 0 ^b 60 0	30 0 ^b 90 0 ^c	42 0 to 72 0	40 0 ^b 60 0 ^c	40 0
Grocers' do. ...	10	48 0	50 0 ^b 70 0	20 0 ^b 60 0	20 0 ^b 70 0 ^c	42 0 to 60 0	40 0 ^b 60 0 ^c	40 0 ^e
Draymen do. ...	8	48 0 ^b	25 0 ^e	42 0 ^b	35 0 ^b	36 0	25 0 ^b 30 0	20 0
Waiters (per week, with board) ...	...	14 0	15 0 to 20 0	40 0	15 0	20 0	14 0 ^b 18 0	15 0
Ostlers do. ...	4 ^a	36 0	20 0 ^b 30 0	15 0 ^b	15 0	15 0	15 0 ^b 20 0	20 0
Shepherds (per week, with rations and lodging) ...	...	10 0	25 0 .....	.....	10 0 ^b 20 0	12 0	16 0	20 0
Domestic Servants (do., with board and lodging) ...	...	10 0	8 0 to 15 0	7 0 to 12 0	8 0 ^b 12 0	10 0 ^b 15 0	10 0 ^b 15 0	15 0
Agricultural Labourers (do. with board and lodging) ...	...	20 0 to 25 0	20 0 ^b 25 0	16 0 ^b 25 0	12 0	18 0 ^b 20 0	14 0 ^b 16 0	18 0

^a Exclusive of perquisites. ^b 9 hours. ^c With board. ^d 10 hours. ^e At harvest time rates are very much higher. ^f 8 hours. ^g 11 hours. ^h 12 hours.

TOWNS IN THE INTERIOR.—RENTS AND PRICES.

	Goulburn.	Bathurst.	Mudgee.	Armidale.	Young.	Albury.	Maitland.
	10s.	9s. to 10s.	8s. to 12s.	8s.	10s. to 15s.	9s. to 15s.	5s. to 7s.
Cottage of four rooms	...	...	...	<i>Rents per week.</i>			
				<i>Prices.</i>			
Beef	4d. to 5d.	4d.	4d.	4½d.	4d.	4d. to 5d.	4½d. to 5d.
Mutton	"	"	"	"	3d.	3½ to 5d.	4d.
Corned beef	4d.	3½d.	3d.	4d.	3½d.	4d.	3½d.
Pork	6d.	5d.	6d.	5d.	6d.	6d.	6d.
Bacon	10d.	7d.	6½d. to 8d.	9d.	8d.	1s.	1s.
Cheese	11d.	8d. to 1s.	7d. to 9d.	"	8d. to 1s.	1s. 3d.	9d.
Flour	1½d.	2d.	2d.	2d.	2½d.	2½d.	1½d. to 1¾d.
Bread	2d.	"	"	"	2½d.	"	1½d.
Potatoes*	1d.	2d.	1d.	3d.	1½d.	.....	1½d.
Sugar	4d.	3½d. to 5½d.	3½d. to 6d.	5d.	4d. to 4½d.	4d. to 6d.	4d.
Tea	2s. to 2s. 6d.	1s. 6d. to 2s. 6d.	1s. 6d. to 2s. 6d.	2s.	2s. to 2s. 6d.	2s. to 3s.	1s. 9d. to 2s.
Coffee	1s. 6d.	1s. 4d. to 1s. 6d.	1s. 5d. to 1s. 8d.	1s. 6d.	1s. 6d.	1s. 3d. to 2s. 6d.	1s. 4d.
Butter*	1s. 8d.	2s.	2s. 3d.	.....	2s. 6d.	1s. 9d.	1s. 6d.
Milk*	6d.	6d.	4d.	6d.	6d.	6d.	6d.
Rice	4d.	3½d.	"	5d.	4d.	4d.	3d.
Oatmeal	5d.	6d.	4½d.	"	6d.	4d.	4d.
Eggs*	2s.	2s.	1s. to 2s.	1s. 6d.	1s.	1s. 9d. to 2s.	1s. 4d.
Candles	6d.	6d.	6d.	7d.	6d.	1s.	6d.
Kerosene oil	2s. 6d.	4s.	3s.	4s. 6d.	3s. 6d.	3s. 6d.	2s. 8d.
Tobacco	3s. to 5s.	2s. to 4s. 6d.	2s. 6d. to 6s.	"	4s. to 5s.	4s. 6d. to 5s.	from 1s. 4d.
Prints	4½d. to 9d.	5d. to 9d.	5d. to 9d.	7d.	7d.	4d. to 1s.	6d. to 8d.
Calico	3½d. to 7d.	2½d. to 1s.	3½d. to 9d.	6d.	4d.	4d. to 2s. 6d.	4d. to 8d.
Mole trousers...	6s. 6d.	5s. 6d. to 8s. 6d.	5s. 6d. to 9s. 6d.	7s. 6d.	8s.	9s. 6d.	5s. 6d. to 7s. 6d.
Rough jackets...	10s.	10s. 6d. to 21s.	12s. 6d. to 20s.	20s.	from 15s.	15s. to 20s.	from 14s.
Twilled shirts...	2s.	2s. to 3s.	2s. 6d. to 4s.	3s. 6d.	from 3s.	2s. 6d. to 4s. 6d.	2s. 9d. to 4s.
Men's boots	9s	7s. 6d. to 15s.	6s. 6d. to 10s. 6d.	9s.	8s.	from 7s. 6d.	7s. 6d. to 8s. 6d.
Women's do.	5s. to 10s.	5s. 6d. to 12s. 6d.	6s. 6d. to 8s. 6d.	"	7s.	from 5s. 6d.	5s. 6d. to 7s. 6d.
Children's do.	2s. 6d. to 5s.	2s. 6d. to 7s.	1s. 6d. to 5s.	5s.	4s.	from 3s. 6d.	4s. to 6s.

* Very scarce at present ; ordinary prices from 50 per cent. less. The ordinary price of butter is from 10d. to 1s. per lb.

The demand
for labour.

It may seem strange but it appears to be literally true in Australia that the greater the supply the stronger the demand for labour. This is not surprising upon reflection. There are so many openings for profitable enterprise, and at the same time there is such a dearth of muscular power and doubt as to its supply that capitalists are timid in a bare labour market, fearing to embark their money upon ventures which may stagnate for want of hands, whilst when there is an ample supply they are emboldened to launch out in directions which they would not think of under ordinary circumstances. The channels for investment are so various and broad that let labour flow in ever so freely it will not overflow the capacity of the banks. Nor is this astonishing when we recollect that, although the conveniences of government and the security of law are spread over the whole of New South Wales, a territorial France and Britain combined and whose facilities for industry cannot easily be equalled, the individuals at present engaged in converting its resources, only to make them richer, and in tasking its fruitfulness, only to make it more fruitful, could be assembled within a field of sixty acres! It is a thousand pities that so much of the raw material of wealth should lie idle when there are so many in older countries who by emigrating to this Colony would leave their countrymen more room to breathe, and secure a far better career for themselves.

The present a
splendid
opportunity for
the immigrant.

There is one feature in the situation of the Colony which makes the present a most favourable time for the immigrant. A very large and increasing surplus revenue fills the State coffers, and the Legislative Assembly recently resolved to go into committee to consider the propriety of expending it in immigration and public works. There is a general demand for railways. Parliament voted two months ago upwards of £2,000,000 for new lines, and probably a further sum of £2,000,000 will be granted for the same purpose next session.

There are disputes as to the routes the lines should follow, but none as to the urgency of railway extension. These facts, and the great internal prosperity of the Country, make this a fine opportunity for those who would settle in Australia. In some places in the interior public and private works are with difficulty completed. Tenders have been invited again and again without response. Promising industries are languishing from the same cause. Railway contractors have been unable to fulfil their engagements. There is no country in which the industrious have a brighter prospect. Men of every creed can find amongst us a pleasant home. Differences of religion are generally reserved for Sundays, and differences of nationality for patriotic festivals. We invite the enterprising of all nations to share the blessings of our liberty, order, and progress. There are few of the arts to which they are accustomed for which an opening could not be made.

For obvious reasons the immigrants most valuable to this Colony are those who leave home not so much on their own account as in the hope of finding better chances for their children in a new sphere of life. The grand advantage of Colonial over European life, in the mind of an affectionate husband and father, is the comfort with which it enables him to surround his wife and children. In his case high wages do not mean more beer and tobacco, but good clothes and a Sunday dinner every day for his family. To men of this class New South Wales offers an attractive home. Their children can be sent decently dressed to school, where they will not be looked down upon, and the youngsters will be able to enjoy thoroughly the most enjoyable period of existence. Starting in life with a good education and a comfortable base of operations, the boys can enter upon the path of industry with the assurance that probity and perseverance will not prove barren virtues. If they possess

superior talents, the avenues to learned professions and political eminence are neither narrow nor difficult. As for the girls, if they will take to domestic service, good lodging and unstinted board, with wages from ten shillings a week upwards, await them ; if, on the other hand, they desire a different style of life, they may become milliners or shop-women. Conscious of the struggle before his offspring in the crowded cities of his native land, these considerations will have more force in the mind of a father of a family than his personal advantage in the matter, great as that undoubtedly is. To know that he has a good chance of rising from man to master is no slight inducement; but how much more pleasing to him is the thought that by voyaging to the antipodes his children may escape the hardships of destiny and become the rich and respected citizens of a new world.

ttlement of
: interior.

Although judging from the existing demand there are fine openings in the metropolis for men of most trades, we confess our strong preference for that sort of immigration which would directly advance the settlement of the interior. In the country towns the tradesman can settle down with ease, and beginning on his own account, instead of taking wages in larger centres, can rise with the growth of the locality into an employer. The capitalist who desires to invest in squatting can secure one of the many fine properties in the settled districts, which his capital and judgment might convert into a valuable estate. The young man with less means but the same object can find openings as a pioneer in the west. The dairy farmer can easily obtain a holding in one of our coast districts where he could produce butter and cheese, eggs and bacon, lamb and veal, for the metropolitan market. The grower of crops can find a home on the banks of the coast rivers, on the tablelands of the south or the north, or on the plains of Riverina. The grazier can combine agriculture with the fattening of stock on our

western slopes. The vigneron can bring the juice of the grape to perfection in south-west, west, and north. There are immense areas open to all, over which as yet primeval verdure reigns. For the agricultural labourer there is abundance of work on good wages, with plenty of good living, and the near prospect of becoming a landowner himself. A friend in the south-west of the Colony, in reply to an inquiry as to the demand for farm hands in his locality, replied to us:—

“The demand far exceeds the supply. We could do with a few hundreds a year of this class, for any we get become farmers themselves so soon as they have saved a few pounds.”

Many landholders are compelled to abandon agriculture, because of the difficulty of engaging labour. They dare not sow when they do not know whether they will be able to reap. The development of our agricultural interest by every legitimate means is the question which should be studied above all others. Pastoral industry, mining enterprise, manufactures, and commerce are making more progress than the plough; yet in a great and undeveloped territory the cultivation of the soil is of supreme importance. So keenly do we feel that agricultural labour is the want of all wants in this Country that we should rejoice if the Government would, instead of employing contractors' navvies, import 10,000 or 15,000 agricultural labourers to make our future railways, and to settle down afterwards upon the public lands and give the lines something to do. The offer from the Colony of two years' labour at fair wages would probably be accepted by thousands of this invaluable class in England and the United States. They would have time to take to the country and to save enough to settle in it; and these are the immigrants least likely to come and go. By some such means the three great necessities of New South Wales, immigration, railways, and agricultural labour, would be provided for at one stroke. Difficulties of detail there may be, but none perhaps which the will to remove them could not overcome. A scheme of

this nature ought to be particularly agreeable to those who most warmly oppose votes for immigration.

It is the premature growth of the towns that causes the vicissitudes of labour in young communities. When the evil comes to a head, and the children of the citizens become a drug in the market, the cry is soon heard "What are we to do with our boys?" If the interior settlers reply, "Send them up the country to assist us in making these vast wastes yield plenty for all," the answer would probably be "No! they must learn a trade." The agitation "for protection to native industry" follows, which being translated means that the excess in the urban population shall be supported, and the evils of centralisation aggravated by unfair exactions from the producing interests of the country in the shape of high imposts upon the commodities their industry has enabled them to purchase.* Thus in the vain hope of contriving that national strength shall be at once precocious and robust are its veins sapped and its limbs deformed. The disorders of a vitiated circulation ensue, and ultimately the whole body politic becomes distempered by the effects of that surprising system which seeks to realise the glory of national manhood by a development of premature brains at the expense of immature muscle.

or relations
in the
other
country.

We can safely assert that nothing would be more unpopular in Australia than a further strain upon the ties which connect the Colonies settled along its coasts with the rest of the British Empire. It is true that the policies of the several Colonies have not a great deal in common, and that in each political controversies are keen, often bitter. But it is not less true that all parties are united in attachment to

*The protective policy of Victoria is the fruit of the evil we allude to. The city of Melbourne, although a creation of yesterday, became, according to the respective populations of the United Kingdom and the Colony, twice as populous as London. No wonder that the

cry for artificial industries arose in the streets of Melbourne. Sydney is relatively as large as Melbourne, but the resources of the Mother Colony have prevented the same result; let us hope they will continue to do so for all time to come.

Fatherland With us the sentiment of loyalty has all the force of a passion. If political change lift into power men who do not share the general feeling they are always careful to respect it. A day of separation may come. In the fulness of time the desire to cling to the parent of our national existence might be a weakness at once unworthy of our spirit and of our destinies. But the period is distant, if it need ever arrive; and any attempt to force such a consummation would be generally deplored. Australians believe that their friendly feelings are reciprocated by the people of England. Not long ago it appeared as if there were a section of home politicians who regarded the Colonies as an incubus to be cast off as soon as a plausible pretence allowed. It is not easy to discover an excuse for a view so narrow and mistaken. It would not be difficult to shew, on the contrary, that the wealth and prosperity of Great Britain have followed in a remarkable manner the growth of her transmarine Empire. We cannot believe that the lofty spirit of the British nation will ever be bent to a policy so disastrous to maritime greatness. It would be a confession in the face of the world that Britannia has ceased to rule the waves, and is prepared to surrender the richest gems of her Imperial crown.

Of late years it has become the fashion to consider that the connexion between the United Kingdom and her self-governed Colonies is more shadowy than real. In point of fact, however, the colonists are just as much subject to the rule of *QUEEN VICTORIA* as any citizen of London. No doubt in our case the Royal power is vested in a deputy, but that adds to the force of the assertion. No Colonial Parliament can assemble without a summons from the representative of Her Majesty. No Bill can become law if he do not so will it. Without the *GOVERNOR's* assent not an acre of Australian soil can be alienated from the public estate, nor may a penny of the public revenue be disbursed without his warrant. If a local Defence Corps be organised,

His Excellency becomes Commander-in-Chief; if a vessel of war be procured he becomes Vice-Admiral. From the highest down to the humblest official all officers civil and military hold their appointments not as servants of the Colony but as servants of the Crown. In these facts there is something more than sentiment, for they include all the attributes of sovereign power. It may be said that a determined effort of the popular will could scatter all these powers to the winds. But could not a determined effort of the popular will do the same in England? There is no reason why the vice-regal chair should not last as long as the throne.

There have been some movements amongst gentlemen in London, who take an interest in the Colonies, towards a new basis of union.* It has even been urged that the Colonies should be represented in the British House of Commons. We think it improbable that Australia would risk the substance of government for an imaginary share in the Imperial Councils. When the people of these territories desire to move the British Government they can do so more effectually in the voices of their Cabinets than by the mouths of a handful of delegates. The planets of the Imperial system are kept in their orbits by an invisible yet effective adjustment in which kindred loyalty and broad benefits in common balance selfish interests. Let theorists attempt to rearrange the plan, and the whole system would soon be involved in chaos. If a Parliamentary representation of the Colonial possessions were possible it would be deplorable. We would advise the advocates of a Federal Parliament to begin with an experiment on a smaller scale. Let a score of boroughs in different parts of the Empire be incorporated. If this federation would make a happy family, then we might begin to believe in the idea of pegging out the territorial

* We take this chance of recognising the services of the members of the Royal Colonial Institute. Their views may be matters of dispute, but the able and zealous manner in which they promote the welfare of all parts of the Empire deserves high praise.

Unravels of the British Empire into a series of parishes. The concession of responsible Government may seem to have weakened the "painter" by which the Colonies are kept in the Imperial wake. But we believe that in this case the frailest is the strongest tie. In matters of local concern local Parliaments can scarcely be too free from the interference of the Colonial Office. In matters affecting the Empire as a whole, Great Britain, the heart and the head of that Empire, must feel, think, act, and if necessary strike for all. In the hour of danger the Mother Country will find that we need no summons from a Federal Council to do our duty.

It would be well if the energy of the advocates of Australian federation, of representation in the House of Commons, of a Council for Colonial affairs, and of all those other proposals which seem to attract the zeal of our friends at home, were bestowed on the one great subject upon which the progress of the Colonies depends—EMIGRATION. With their immense areas and capacity, the provinces of Australia turn to the Mother Country for help in the task of developing their resources; and as the departures from Great Britain to these Colonies have returned far more wealth to her than if the people had staid at home, the encouragement of emigration to Australia may be a very wise domestic policy. It would be difficult to point to richer fields for the surplus labour and capital of the United Kingdom. Unhappily for us and them, the current has set in other directions: for the United States of America absorb the one, and Europe borrows the other—much of it never to be repaid. In this way the plethora of spirit and resources, which used to add province after province to the Empire, and might even now renew the strength of the Imperial system, is lavished upon the rising rivals of its greatness. Is this a desirable state of things? Is it not rather to be lamented, that our stalwart countrymen should emigrate to a foreign soil, and British capital pass into alien hands, when prosperous homes can be made

for the men under the sway of their rightful Sovereign, and good investments for the money in our extensive possessions?

Conclusion.

We have concluded our task, which has been a pleasant one. We think it would be difficult to examine attentively the condition or conjecture the prospects of New South Wales without a glow of satisfaction. There is so much of plenty and happiness amongst all classes of the population, and the elements which can yield the like blessings to millions more are so rife, that the most depressing disposition can create no anxiety as to the future. The Colony is pre-eminent in pastoral wealth; has areas large as kingdoms suitable for the leading branches of husbandry; and slight examination has brought to light untold treasures of coal, iron, gold, copper, and tin, to assure grandeur in those riper forms of industry to which her resources hasten our enterprise. A magnificent seaport shelters her growing fleets and gives her the command of the Pacific. Blessed with the wealth of every favoured zone there does not seem to be any height of national development to which this country may not aspire. If we turn to the social fabric the eye rests upon a community young yet conservative, pushing yet generous, free yet orderly. Living under the political system which has made England illustrious, our people have adopted also the commercial policy which has helped to make her prosperous and powerful. If they strive, besides, to emulate the virtues of the British character, New South Wales may soon become the Queen of the South, with none to dispute her right to wear her crown.

APPENDICES.

GENERAL REMARKS ON CLIMATE OF NEW SOUTH WALES.

By MR. H. C. RUSSELL, B.A., F.R.A.S., GOVERNMENT ASTRONOMER.

THE Colony is comprised within the parallels 28° and 37° south latitude, and 141° and 153½° east longitude. On the west the 141st meridian forms its boundary, and on the east the coast is washed throughout its whole length by the great Pacific Ocean. There are no very marked inlets or promontories, and the absence of landmarks is a conspicuous feature of the coast.

At a distance of from 4 to 5 miles from the coast runs one of the great ocean currents. This takes its rise to the north of Australia and is necessarily a warm current; it probably has much to do with the remarkably uniform temperature of Sydney. The set of this stream is steadily south, at the rate of from one to two miles per hour, except after strong southerly winds, when the surface, at least sometimes, stops for a day or two.

The contour of New South Wales is remarkable and affects the atmospheric conditions very much.

The great Dividing Range known as the Blue Mountains, runs generally parallel to the coast, but varies in distance from it from 25 to 100 miles. The altitude alternates from a few hundred to 7,000 feet; but is generally 2 to 3,000 feet. The watershed of the Colony is divided by it into two, the eastern and the western; the former has a rapid slope to the sea, and is watered by numerous rivers; the majority of these find the sea after a short course, but a few, such as the Hunter and the Hawkesbury, follow the base of the Dividing Range for many miles through flat and alluvial country. Occasionally these rivers are flooded, especially when the easterly rain-bearing winds bring the clouds so low that they are intercepted by the mountains; rain-storms similar to those of the Tropics then result, and sometimes three or four hours rain will send sufficient water down the mountain slopes to cause heavy floods. The amount of water which may fall at such times may be imagined when it is known that even in Sydney, away from the mountains, rain has often fallen at the rate of an inch per hour for many hours in succession; and for a short time once at the rate of 5·250 in. per hour. At Newcastle, on the 18th March, 1871, during one of these storms, 10·610 in. rain fell between 1·30 p.m. and 4 p.m., or two and a half hours.

The average rainfall over this watershed taken for the five years, 1871 to 1875, is 41 inches; the number of days on which it fell, 103; and the average fall on each day, 0·415 inches.

The western slopes of the mountains are very gradual, beginning at 2,500 above the sea, they extend westward 400 miles to the Darling River, which at that part is about 400 feet above the sea. In a country which is so flat and extensive the rivers are necessarily long and sluggish, and, as they are fed by a small rainfall averaging only 24 inches, and at the same time subject to great heat and evaporation, they are small.

The mean temperature in the shade, taking the average of all the stations on both sides of the Dividing Range, is 59·6. If the stations on each watershed are taken separately, the difference in the mean temperatures is very small, but the range of temperature inland is very much greater than it is on the coast, both for the day and the year. The range of the shade thermometer on the plains, and taking a whole year, is sometimes as much as 100 degrees, or from 120°·0 to 20°·0. The range of the *mean temperature* is from 68·0 at Narrabri, on the north, to 53·0 at Cooma, on the south.

In the Colony generally the air is dry and clear, and the prevailing winds are healthy and cool. In summer they come from N.E. and west; in winter from west, S.E., and southerly.

As an index of the general atmospheric conditions, tables are appended from four large towns,—Sydney, because of its central position; Armidale for northern districts; Bathurst for western plains; and Goulburn for southern districts. These show :—

The average atmospheric pressure.

The average shade temperature.

The relative amount of humidity (if when saturated the air contains 100 parts).

The prevailing direction and force of the wind (taking that as the *prevailing* direction from which the wind blows oftenest without reference to its force).

The mean of all the readings of the maximum thermometer.

The same for the minimum, with the highest and lowest readings of each recorded during the year.

The amount of rain in inches, and the number of days on which it fell, also the date and amount of the heaviest fall in the year.

The amount of evaporation in inches from a water surface.

The average proportion of the sky covered with clouds (on the assumption that when all the sky is covered it is equal to 10 parts).

Also a general comparative table of temperature, rainfall, &c., at the various stations of the Colony for the years 1871 to 1875.

H. C. RUSSELL,
Government Astronomer.

SYDNEY.

Year.	Mean of observations taken at 9 a.m.						For 24 hours previous to 9 a.m.						Clouds, 0 to 10.		
	Barometer at 32° Fah. and mean sea level.	Temperature in shade, mean of max. and min.	Humidity, 0 to 100.	Wind.		Temperature in shade.				Rain.				Evaporation.	
				Direction.	Force, 0·6.	Means.		Extremes.		Total fall.	No. of days.	Greatest fall in one day.			Date.
						Max.	Min.	Max.	Min.						
1866...	30·033	63·3	72·1	W.	0·7	70·4	56·7	101·0	38·2	inches, 38·800	149	inches, 3·010	15 June...	inches, 46·206	4·3
1867...	30·021	64·3	70·6	W.N.W.	0·7	71·2	57·4	99·1	39·1	59·680	126	5·650	12 April ..	48·449	5·0
1868...	30·083	63·3	72·9	W.N.W.	0·7	70·4	56·1	101·5	40·9	43·060	127	6·180	17 Feb. ...	40·188	5·0
1869...	30·047	63·0	73·3	W.N.W.	0·7	69·8	56·2	102·6	39·7	48·190	134	4·450	19 March.	40·840	5·3
1870...	30·004	62·8	75·2	W.	0·9	69·2	56·5	105·2	38·7	64·215	178	4·080	13 May ...	38·338	6·3
1871...	30·052	62·4	74·9	W.	0·7	69·5	55·3	103·8	38·7	52·274	141	3·236	13 March.	40·589	5·6
1872...	30·054	62·6	75·9	W.	0·8	69·2	55·9	98·3	36·8	37·122	161	2·800	13 June...	43·109	6·2
1873...	30·063	63·0	75·9	W.	0·7	69·7	56·2	100·1	38·0	73·404	176	8·900	25 Feb. ...	49·531	6·0
1874...	30·041	63·0	75·6	W.	0·8	69·9	56·1	96·3	36·9	63·600	173	3·990	23 Feb. ...	53·112	6·0
1875...	30·012	63·3	73·2	W.N.W.	0·8	70·5	56·1	98·9	40·3	46·251	153	3·895	29 May ...	59·628	5·9
Sums or Means.	30·041	63·1	74·0	W.	0·8	70·0	56·3	extreme 105·2	extreme 36·8	sum 526·596	1518	8·900	25/2/73	sum 459·990	5·6

Mean rainfall for ten years 52.660 inches, and mean evaporation 45.999 inches.

ARMIDALE.

Year.	Mean of observations taken at 9 a.m.							For 24 hours previous to 9 a.m.					Clouds, 0 to 10.	
	Barometer at 32° Fah. and mean sea level.	Temperature in shade, mean of max. and min.	Humidity, 0 to 100.	Wind.		Temperature in shade.			Rain.					Evapora- tion.
				Direction.	Force 0 to 6.	Means.		Extremes.	Total fall.	No. of days.	Greatest fall in one day.	Date.		
						Max.	Min.							
1870*	29.814	60.3	.....	E.	2.0	69.6	44.7	86.2	21.1	inches, .....	.....	inches, .....	.....	6.0
1871†	30.113	56.2	79.3	E.	1.5	66.0	46.8	93.2	20.1	16.740	44	3.200	28 Dec.	4.6
1872‡	30.169	55.9	79.1	W.	1.4	64.6	47.3	89.2	22.1	33.620	77	2.650	24 Jan.	...
1873...	.....	57.9	79.0	W.	1.4	67.6	50.5	95.2	30.1	28.710	98	5.000	13 Jan.	5.1
1874...	.....	55.7	86.2	W.	1.5	67.2	44.2	89.2	20.0	16.606	76	1.340	16 Aug.	4.2
1875...	30.029	58.0	79.9	W.	1.5	72.6	43.3	92.0	30.0	37.540	86	3.020	10 Aug.	3.9
Sums or means‡	.....	57.3	80.7	W.	1.6	67.9	46.1	extreme 95.2	extreme 20.0	sum 133.216	sum 381	5.000	13/1/73	4.8
														sum 175.763

* No rain gauge or evaporator.

† Rain and evaporation for seven months only.

‡ Barometer for nine months, and evaporation eight months.

§ Mean rainfall for period 26.643 inches, and mean evaporation 35.153 inches.

BATHURST.

Mean of observations taken at 9 a.m.										For 24 hours previous to 9 a.m.					Clouds, 0 to 10
Year.	Barometer at 32° Fah. and mean sea level.	Temperature in shade, mean of max. and min.	Humidity, 0 to 100.	Wind.		Temperature in shade.				Rain.			Evapora- tion.		
				Direction.	Force, 0 to 6.	Means.	Extremes.	Total fall.	No. of days.	Greatest fall in one day.	Date.				
				Max.	Min.	Max.	Min.					Max.	Min.		
1870...	30.291	59.1	76.4	S.W.	1.4	75.8	42.3	107.0	24.0	inches.	83	1.570	13 Nov. ...	.....
1871...	30.049	58.5	76.7	W.	1.3	74.1	42.8	100.5	20.0		72	1.770	8 Feb. ...	.....
1872...	30.018	57.3	77.0	W.	1.0	72.0	42.6	103.0	22.0		78	3.300	28 Nov. ...	.....
1873...	30.034	55.7	79.8	W.	1.1	70.7	40.6	101.5	13.0		73	2.200	22 Feb. ...	.....
1874...	30.033	57.3	73.0	W.	1.0	72.4	42.1	103.5	21.0		84	1.710 {	24 March 20 May...	}	
1875...	29.991	59.3	71.8	W.	1.2	74.4	44.3	102.5	21.0		70	1.530	5 Feb. ...	.....
Sums or means*	30.069	57.9	75.8	W.	1.2	73.2	42.5	extreme 107.0	extreme 13.0	sum 164.730	sum 460	3.300	28/11/72	.....

* Mean rainfall for period 27.455 inches.

GOULBURN.

Year.	Mean of observations taken at 9 a.m.										For 24 hours previous to 9 a.m.					Clouds, 0 to 10.
	Barometer at 32° Fahr. and mean sea level.	Temperature in shade, mean of max. and min.	Humidity, 0 to 100.	Wind.		Temperature in shade.				Rain.				Evapora- tion.		
				Direction.	Force, 0-6.	Means.		Extremes.		Total fall.	No. of days.	Greatest fall in one day.	Date.			
						Max.	Min.	Max.	Min.							
1870*..	29.987	58.0	65.5	W.	2.3	69.7	46.3	98.0	28.0	13.790	52	2.700	24 Dec.	17.078	6.0	
1871...	30.069	56.9	71.8	W.	0.1	70.0	43.8	102.9	22.1	23.450	111	2.980	21 Feb.	37.336	5.3	
1872...	30.069	55.4	76.7	W.	0.1	69.8	41.0	105.6	13.0	29.986	99	2.860	22 Nov.	38.435	4.5	
1873...	30.075	57.3	80.7	W.	0.0	70.7	43.7	98.2	23.1	31.370	92	2.600	28 Feb.	40.206	5.2	
1874...	30.072	56.8	...	W.	0.2	69.6	44.0	104.4	20.8	26.850	90	2.080	17 Feb.	39.170	6.0	
1875...	30.044	56.5	72.9	W.	0.3	69.8	43.1	106.1	21.0	25.570	88	2.650	7 June	44.620	5.8	
Sum or means†	30.044	56.8	73.5	W.	0.5	69.9	44.0	extreme 106.1	extreme 13.0	sum. 151.016	sum. 532	2.980	21/2/71	sum. 216.845	5.5	

* For last four months only.

† Mean rainfall for period 26.169 inches, and mean evaporation 36.141 inches.

No.

COMPARATIVE TABLE of TEMPERATURE, RAINFALL, &c.,

Stations.	Least distance from East Coast in miles.	Height above sea in feet.	Temperature.					Rainfall.					Number of days			
			1871.	1872.	1873.	1874.	1875.	1871.	1872.	1873.	1874.	1875.	1871.	1872.	1873.	1874.
Tenterfield	80	..	55.4	56.8	54.6	58.0	32.595	37.140	35.573	25.910	22.780	120	101	72	..	
Grafton	232	40	65.2	68.1	68.2	67.4	..	35.258	42.911	31.002	36.500	..	92	76	76	
Inverell	124	..	..	..	..	60.2	..	..	..	..	21.690	..	..	..	..
Bourke	393	..	61.9	65.3	64.0	62.4	..	24.000	11.900	*23.470	2.850	..	52	39	44	
Narrabri	196	00.0	68.2	67.8	67.1	68.1	23.705	24.880	32.340	28.020	20.380	63	63	65	56	
Armidale	80	3278	56.2	55.9	57.9	55.7	58.0	16.740	33.620	28.710	16.906	37.540	44	77	98	
Goonoo Goonoo	110	1550	..	..	..	61.5	..	..	..	..	21.570	..	..	..	..
Port Macquarie	1	53	63.9	64.0	64.4	64.5	57.616	47.243	96.903	45.075	69.735	120	139	149	139	
Murrumbundi	94	1545	61.6	60.2	60.6	62.3	28.796	23.670	44.100	..	14.850	83	62	44	..	
Cassilis	120	..	61.4	61.4	60.6	63.6	23.650	23.250	28.000	28.240	25.040	80	56	60	76	
Scone	78	..	..	..	..	62.9	..	..	..	..	22.780	..	..	..	..
Muswellbrook	68	475	64.4	61.4	..	63.0	65.4	14.818	28.503	..	12.090	31	46	..	..
Dubbo	182	..	59.6	61.1	55.7	63.2	..	15.550	24.750	17.840	*10.050	20.700	57	75	41	
Mudgee	121	1500	56.6	60.0	59.7	61.8	..	21.100	32.820	23.638	34.490	..	77	66	49	
Dalwood	27	..	..	..	..	..	..	33.000	25.650	41.750	..	..	53	96	101
West Maitland	18	98	65.3	62.8	63.0	60.2	61.8	31.875	23.206	41.000	37.615	37.805	108	104	107	
Lambton	7	..	60.7	59.7	59.3	60.4	..	38.580	64.880	64.640	52.170	..	124	125	112	
Newcastle	1	112	63.7	63.6	63.7	63.3	63.8	62.630	37.840	57.600	62.930	49.600	116	128	139	
Orange	124	2891	53.2	54.5	54.9	56.4	52.6	34.480	46.210	36.310	50.050	38.210	120	121	115	
Bathurst	96	2200	58.5	57.3	55.7	57.3	59.3	22.900	30.630	26.500	26.530	22.650	72	78	73	
Forbes	176	1050	..	..	..	60.3	..	..	..	..	6.720	..	..	..	..
Kurrajong	36	1870	55.3	54.8	54.1	54.4	54.0	65.970	42.970	46.000	40.365	36.880	126	125	128	
Mount Victoria	61	3490	..	54.2	54.1	55.1	54.2	..	30.310	50.790	*23.130	23.420	..	126	119	
Woodford	50	2192	..	58.3	57.7	57.5	..	..	40.920	64.300	55.470	..	..	140	151
Parramatta	16	..	61.4	..	..	58.4	..	..	28.270	..	30.280	23.790	..	104	..
Windsor	27	53	..	..	64.0	63.6	64.0	34.468	24.254	41.380	32.078	33.378	..	..	152
Sydney	5	155	62.4	62.6	63.0	63.0	63.3	52.147	37.122	73.404	63.600	46.251	141	161	176	
Liverpool	15	..	60.8	60.2	60.1	59.0	..	41.852	27.013	50.901	41.927	35.705	135	158	153	
Wentworth	476	..	64.4	64.7	65.1	..	..	15.242	15.770	12.980	10.980	12.780	66	77	80
Wilton	13	..	..	..	..	..	..	..	31.540	48.240	33.640	34.750	..	70	93
Young	140	..	56.5	58.9	60.0	58.9	..	..	37.530	27.490	27.510	26.410	..	70	81
Cordeaux River	6	..	..	..	..	..	..	..	43.150	83.910	60.280	60.860	..	109	134
Wollongong	0	..	62.4	61.8	62.3	62.3	61.6	48.340	28.310	49.330	..	29.450	75	48	66	
Moss Vale	31	..	55.2	54.8	55.4	55.9	..	..	45.510	59.130	46.880	44.800	..	109	93
Goulburn	54	2129	56.9	55.4	57.3	56.8	56.5	32.450	29.986	31.370	26.850	25.570	111	99	92	
Terara	4	..	..	..	..	..	..	..	36.580	72.320	..	..	..	112	114
Wagga Wagga	161	..	59.6	60.0	59.8	56.2	..	..	30.240	20.830	28.350	24.544	..	88	62
Cape St. George	0	175	61.9	61.5	62.1	61.7	61.4	61.932	37.134	64.130	38.260	46.090	150	138	130	
Queanbeyan	60	..	52.2	50.0	52.0	56.0	57.5	27.820	29.020	26.040	18.700	17.140	100	80	65	
Urana	218	400	64.5	60.4	66.3	63.0	62.3	21.080	28.780	18.300	*17.560	24.570	28	50	58	
Deniliquin	287	410	61.7	59.4	60.2	61.4	61.8	20.770	17.390	22.540	18.270	24.140	67	74	78	
Kiandra	88	4640	46.0	43.9	43.0	..	..	74.100	55.980	56.900	..	..	138	114	117
Bodalla	5	..	..	..	..	57.4	..	..	..	..	..	23.156	..	..	..
Albury	175	572	..	60.4	59.5	59.3	58.2	30.850	28.450	27.110	27.780	34.300	98	72	95	
Cooma	52	2637	52.4	51.9	54.5	53.8	52.9	24.290	16.810	22.470	14.230	9.800	80	69	76	
Eden	0	107	60.7	60.6	60.8	59.8	59.6	53.740	24.630	53.780	45.490	43.610	131	107	120	
Sums .....	..	..	1248.8	2125.2	2086.9	2098.1	2230.4	1024.575	1304.919	1652.820	1195.258	1217.654	2,505	3,780	3,796
Average .....	..	..	59.5	59.0	59.6	59.9	60.3	35.330	31.827	42.330	34.150	29.609	93	95	97
Eastern Stations only ..	..	..	..	..	..	..	..	41.635	33.517	50.983	37.961	35.592	102	103	110

* **BOURKE.**—1874 results are only for nine months. Telegraph Office burnt down; had the instruments replaced, May 1875.

* **MUSWELLBROOK.**—Rainfall for first four months of 1874, only.

* **DUBBO.**—Rain-gauge and evaporator out of order during the first four months of the year 1874. No rainfall measurement for that period.

* **DALWOOD.**—1874 returns for four months only.

* **MOUNT VICTORIA.**—No observations for August, September, October, and November, 1874—the observer being on duty line-repairing.

* **WOLLONGONG.**—Rain-gauge out of order; no record of rainfall, 1874.

* **WAGGA WAGGA.**—No rainfall for December, 1874.

* **URANA.**—No rainfall sent for February, November, and December, 1874.

* **DENILIQUIN.**—Amount of rainfall only for eleven months; February rainfall missing.

* **ALBURY.**—No rainfall measured during February.

5.

at various Stations in New South Wales, for the Years 1871 to 1875.

rain.	Evaporation.					Rainfall on western side of Range.										Stations.
1875.	1871.	1872.	1873.	1874.	1875.	1871.	1872.	1873.	1874.	1875.						
						inches	days	inches	days	inches	days	inches	days	inches	days	
65	47.961	26.729	24.483	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Tenterfield.
74	.....	35.057	48.786	49.501	49.668	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Grafton.
63	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Inverell.
23	.....	.....	.....	.....	52.791	.....	.....	24.000	52	11.900	39	23.470	44	2.850	23	Bourke.
66	66.141	76.074	62.863	62.383	70.769	23.705	68	24.880	63	32.340	65	28.020	56	20.380	66	Narrabai.
36	39.064	.....	29.312	40.186	40.207	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Armidale.
48	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	21.570	48	Goonoo Goonoo.
140	55.739	72.235	62.916	62.801	74.015	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Port Macquarie.
43	47.931	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Murrurundi.
69	.....	.....	41.201	34.767	41.554	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Cassilis.
47	.....	.....	.....	.....	58.272	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Scone.
66	43.527	57.466	.....	*	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Muswellbrook.
59	58.382	59.133	38.257	*15.539	.....	15.550	57	24.750	75	17.840	41	.....	.....	20.700	59	Dubbo.
*	42.365	.....	.....	26.255	*	21.100	77	32.820	66	23.038	49	34.490	79	*	*	Mudgee.
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Dalwood.
91	55.311	49.126	42.447	52.580	60.963	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	West Maitland.
110	.....	40.652	43.515	54.929	58.966	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Lambton.
103	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Newcastle.
111	33.967	42.405	30.916	41.260	50.431	34.430	120	46.210	121	36.310	115	50.050	128	38.210	111	Orange.
70	.....	.....	.....	.....	.....	22.900	72	30.630	78	26.500	73	26.530	84	22.050	70	Bathurst.
22	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6.720	22	Forbes.
106	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Kurrajong.
85	.....	34.916	46.564	*21.430	59.607	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Mount Victoria.
*	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Woodford.
74	.....	.....	42.372	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Parramatta.
148	.....	.....	24.490	26.302	32.412	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Windsor.
153	40.589	43.109	49.531	53.112	59.628	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Sydney.
145	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Liverpool.
79	65.237	75.802	70.241	.....	80.242	15.242	66	15.770	77	12.930	80	10.980	72	12.780	70	Wentworth.
98	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Wilton.
54	.....	33.801	49.778	37.963	27.478	.....	.....	.....	.....	.....	.....	.....	.....	26.410	54	Young.
130	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Cordeaux River.
36	37.708	42.442	38.200	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Wollongong.
93	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Moss Vale.
89	37.336	38.435	40.206	39.170	44.620	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Goulburn.
*	.....	.....	.....	.....	*	.....	.....	.....	.....	.....	.....	.....	.....	.....	*	Terara.
70	.....	47.041	55.697	65.623	61.307	.....	.....	30.240	88	20.830	62	23.350	73	24.544	70	Wagga Wagga.
96	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Cape St. George.
67	40.479	46.526	42.791	36.008	33.994	27.820	100	29.020	80	26.040	65	18.700	61	17.140	67	Queanbeyan.
77	58.027	48.477	67.587	79.352	62.600	21.080	28	23.780	50	18.300	58	*17.560	*65	24.570	77	Urana.
65	.....	.....	.....	.....	.....	20.770	67	17.390	74	22.540	*78	18.270	57	24.140	65	Deniliquin.
37	.....	.....	.....	.....	35.382	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Kiandra.
95	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Bodalla.
72	.....	24.606	.....	.....	26.059	30.859	98	23.450	72	27.110	95	27.780	81	34.300	96	Albury.
123	.....	.....	26.390	26.083	23.804	.....	.....	.....	.....	.....	.....	.....	.....	9.800	72	Cooma.
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Eden.
136	769.824	894.002	978.543	825.854	1113.839	233.506	753	332.940	896	276.278	820	284.200	800	327.854	1,033	
81	48.114	47.053	44.479	43.466	50.631	23.351	75	27.745	75	23.023	68	25.836	73	20.491	65	
82	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

The average for the five years for Eastern Stations, 41.351 inches on 103 days; Western, 24.243 on 71 days.

The average rain in one day is, therefore—for Eastern Stations, 0.415; for Western, 0.344 inch.

Returns kindly furnished by—

Rev. J. Spicer Wood, Lambton.

J. Comrie, Esq., Kurrajong.

A. Fairfax, Esq., Woodford.

J. Tebbutt, Esq., F.R.A.S., Windsor.

Rev. R. L. King, Liverpool.

W. Macdonald, Esq., Moss Vale.

②

A PAPER ON THE LIVE STOCK AND PASTURES OF NEW SOUTH WALES.

BY MR. ALEXANDER BRUCE, CHIEF INSPECTOR OF STOCK.

DESCRIPTION of the various classes of Pasture Lands in New South Wales and their adaptability for breeding and rearing the different kinds of Stock.

IN order to make this paper as clear as possible the Colony will be described in accordance with five divisions, namely :—(1) The Coast—(2) The Mountainous—(3) The Western Slopes—(4) The Intermediate—and (5) The Salt Bush Divisions; and the capabilities of each of these divisions for the depasturing of stock will be described as briefly as possible under the heads of Climate, Natural features, Soil, and Natural grasses.

I.—THE COAST DIVISION.

The Coast Division, which extends along the eastern seaboard of the Colony from Queensland on the north to Victoria on the south, is about 660 miles in length, with an average breadth of 40 miles.

In this division the *climate* is mild and comparatively humid.

In its *natural features* it is generally level, with here and there a tract of hilly or undulating country, and with spurs from the Main Coast Range running towards the sea.

The *soil* in many portions, especially at the mouths of the rivers and on the river flats, is rich and fertile.

The natural *grasses* on the best soil are strong and rank, so much so that the pasture is of comparatively little value until they are replaced by artificial grasses. In the southern portions the white clover is thoroughly established, and has added very much to the value of the country.

HORSES.

Horses do well in all parts of this division where the soil and pasture are at all favourable, and even in the poorer portions with inferior pasture the lighter breeds do fairly and keep in good condition all the year round.

CATTLE.

This kind of stock also does well in the coast country, and it is in the southern portion of it that the principal dairies are situated,—than which there can be no better guarantee as to the excellent quality of the pasture.

SHEEP.

The purely coast country is not adapted for Merino sheep,—the soil being too deep and strong, the grass too rank, and the climate too humid for the breed. Some of the long-woolled, large-framed breeds of English sheep, however, such as the Romney Marsh and Cotswold, do well in many portions of it.

II.—THE MOUNTAINOUS DIVISION.

This division, like the last, extends from the Victorian Border to Queensland, and is about 600 miles in length. It has an average breadth of 100 miles from its northern extremity, on the Queensland Border, until it reaches the heads of the Hunter River; thence an average breadth of 40 miles to the upper waters of the Murrumbidgee, where it stretches out to a breadth of 100 miles in a westerly and north-westerly direction to the head of the Billybong Creek, and thence southerly to the Murray River. It is bounded on the north by Queensland, on the east by the Coast Division, and on the south by Victoria; and its western boundary-line may be defined as follows, namely: Commencing at Jingellic, on the Upper Murray; thence north-easterly to Gundagai; thence easterly to Gundaroo; thence northerly by Gunning, Crookwell, and Binda, to Rockley; thence north-westerly to Hill End; thence easterly to Capertee; thence northerly by Merriwa to the Liverpool Ranges; thence easterly by these Ranges and by Murrurundi to Nundle; and thence northerly by Bendemeer, Bundarra, Inverell, and Ashford, to the Queensland border.

The *climate* ranges from that of perpetual snow to temperate and cold on the tablelands and in the hilly country.

The *natural features* of this division are, as the name indicates, to a large extent mountainous and rugged. It includes the main coast range, its leading ridges, and a large proportion of what are termed the Australian Alps, as well as the tablelands of Monaro and New England, and the higher country included in the Bathurst and Goulburn districts.

A large proportion of this division is very rocky, and the *soil* comparatively thin and barren, but it also contains a great deal of very fair pasture land, and much of it—especially where the formation is volcanic or limestone—is sound, deep, and rich.

The *natural grasses* where there is any depth of soil are strong and rank; and when the formation is favourable they are nutritious and fattening, but where it is unfavourable (granite or free stone)—as a large portion of this division is—the grasses are of course less nourishing. In those portions again where the soil is light the grass is poor, and there are large tracts in which there is little else but bush and scrub.

Where there is any depth of soil the most of the English grasses thrive well, and this is especially the case with the white clover, which is fast spreading in this division.

HORSES.

Although the pastoral lands in this division are comparatively cold and exposed, horses keep in fair condition all the year round. They lose flesh in the winter months, but soon recover; and by the end of spring they are again in good condition. Many of the hardest and most useful saddle horses and some of the smaller draught horses are bred among these hills and mountains.

CATTLE.

Except in its more mountainous and scrubby portions cattle thrive and keep their condition well; and a large proportion of the store cattle are bred here.

The breeds best adapted for this class of country are the Hereford and Blackpolled, as they are more robust, thicker in the skin, and carry heavier coats than the Shorthorn or Devon.

SHEEP.

On the drier portions of this division, excluding of course the very high hoppy country towards the tops of the mountains, both the strong framed Merino and the long-woolled English sheep thrive well, but on some of the more mountainous runs, where the formation is granite or free stone, the sheep are more or less liable in wet weather to foot-rot, fluke, and worms. Although there are many parts where comparatively fine Merino wools, both combing and clothing are grown, the soil is generally too strong, the grass too rank, the situation too exposed, and the climate too cold, for the very fine-woolled small-framed Merino. Still in the better portions with careful management both the large-framed Merino and the English long-woolled sheep make an excellent return; the Merino clipping in the grease some 5lbs. to 6lbs., and the long-woolled flocks 7lbs. to 8 lbs. per sheep, worth on an average 10d. per lb.

III.—WESTERN SLOPES.

This division also extends from the Queensland Border, on the north, to the Victorian boundary on the south. It is about 550 miles in length, with an average breadth of 90 miles. It is bounded on the east by the western boundary of the mountainous division, and its western boundary-line may be defined as follows: Commencing at Mulwala, on the Murray; thence northerly and north-easterly by Urana to the Murrumbidgee, between Wagga Wagga and Narandera; thence northerly to the Lachlan, below Forbes; thence in the same direction to the Macquarie, below Dubbo; thence northerly to the Castlereagh above Coonamble; thence north-easterly to the Namoi, between Wee Waa and Narrabri; thence northerly to the Gwydir, below Moree; and thence northerly to the Queensland Border, near Bogabilla.

The *climate* is mild and equable—neither too hot nor too cold—and stock can be kept in good condition on the natural grasses all the year round.

In its *natural features* it is hilly and undulating, with here and there considerable tracts of flat country and plains.

The *soil* is generally fertile and kindly, and though generally light, in some districts it is rich and deep. There are tracts of comparatively poor soil, but they are of no great extent; and also in some parts stony barren ridges.

The *natural grasses* on the best portions grow well, and are very nutritious and fattening as a rule, even where the soil is light and the sward comparatively poor and thin.

HORSES.

The climate, natural features, soil, and pasture of this division are such as to render it superior to any other part of the world for horse breeding, except, perhaps, a few tracts of similar country in the neighbouring Colonies. The climate being essentially

temperate—neither too hot nor too cold—and the winter mild and short, the condition of the stock is scarcely reduced at all by the cold. The hilly and undulating nature of the country, again, develop the muscles of the horse, and give him sound wind and good action, while its hollows and gullies afford the necessary shelter. With abundance of nutritious grasses on the lower grounds, and the nice sweet pickings, which they like so well, on the light but fertile ridges, and the shelter alluded to, the pasturage in this division is all that horse can desire.

CATTLE.

It will be seen from the description given above of the suitability of this division for horse breeding that it is equally well adapted for cattle. All the breeds do well here, but there are portions better adapted for some kinds than for others; and they are beginning to be stocked according to their capabilities. Thus we find the Short-horn on the richer and more fertile portions, and the Hereford and Devon, on the lighter soils.

SHEEP.

This is the pick of the Colony for the growth of the fine Merino wools. In fact it is as good as any in the world,—being sound, well grassed, and watered, and possessing, as we have shown, a temperate climate, in which the fleece grows without check all the year round. In this part of the Colony the very finest Merino wools, including the far-famed Mudgee and Merriwa clips, are grown—either combing or clothing, according to the taste or fancy of the owner, or the breed of the sheep originally on the run; many of the growers of the best wools having both combing and clothing sheep on the same run.

IV.—INTERMEDIATE DIVISION.

This division derives its name from the fact that it is between two distinct classes of country,—the saline and the non-saline; and from being in a transition state, i.e., changing from a salt-bush to a grassed country.

It extends from Queensland on the north, to Victoria on the south. Its length is about 580 miles, and its width, which is much greater on the Victorian than on the Queensland Border, averages about 120 miles.

It is bounded on the east by the western boundary of the Western Slopes; while its western boundary-line starts at the junction of the Murrumbidgee and the Murray; thence it runs due north (say) 30 miles from the river; thence north-easterly to the Bogan River, at the junction of the Duck Creek with that river; thence to the Namoi River, at the junction of the Narran River; and thence by the Namoi and the Barwon Rivers to the Queensland Border.

The *climate* of this division is hotter and drier than that of the Western Slopes; but although not so agreeable to live in, it is exceedingly healthy for all descriptions of stock, and, except in seasons of great drought, they keep in good condition all the year round.

In its *natural features* it is comparatively flat and level, with here and there—especially on the eastern side—small eminences and ranges rising out of the plains.

The *soil* is decidedly saline; and, although it is becoming firmer and better grassed every year, it still retains many of the characteristics of the salt-bush country, especially that of being very fattening. In several portions, such as in the country between the Lower Lachlan, Murrumbidgee, Billybong, Murray, Lower Bogan, Macquarie, Castlereagh, and Barwon Rivers, much of the soil is deep and rich; and throughout a large extent of its area though light it is kindly and fertile. There are also considerable tracts of poor, scrubby country, which are of comparatively little use for grazing purposes.

In the better portions at certain seasons of the year the *natural grasses* are luxuriant and very fattening, with wild oats and barley grass on the deeper soils. On the lighter soils again the grasses are patchy and thin, but throughout its whole extent they are yearly becoming thicker and the sward better. They are of course highly nutritious, springing as they do from saline soil. In many portions of this division too there is in spring, and with the autumn rains, a full growth of the richest herbage, and in some places also a good deal of salt and cotton bush, though the latter are dying and being eaten out.

HORSES.

In this part of the Colony horses do quite as well as on the Western Slopes, but those bred there are preferred through being hardier and safer to ride. Although from the comparative thinness of the grass, the country is better adapted for light harness and saddle horses than heavy draught, there is no part of the world where horses, and indeed all sorts of stock, thrive so well, are so healthy, or so remunerative, as in the Intermediate Division of this Colony, and in country of a similar character in the adjoining colonies.

CATTLE.

The high terms in which this part of the Colony has been described as regards horse breeding apply equally to it as pasture land for cattle. But as sheep have been found much more remunerative than cattle; and as this portion of the Colony is particularly well suited for sheep,—cattle have of late years been generally displaced by sheep.

SHEEP.

The climate in this Division, though hotter than that of the Western Slopes, is thoroughly healthy for sheep—perhaps the most healthy in the Colony, and not to be excelled in this respect in any part of the world—whilst the feed, which is a mixture of salt-bush and grass, is very nutritious,—too much so in fact for the production of the very finest wools; for it is a well established fact that the smaller framed fine-woolled sheep taken to this division after a generation or two increase very considerably in size, and as the frame enlarges the wool becomes stronger and more shafty. The climate also appears to be too warm to admit of the growth of very fine and very dense wool at a profit. Its speciality, therefore, taking the district as a whole, seems to be a very sound well grown combing wool, ranking from fair to very good. On the eastern side of this division there are tracts of country in which fine clothing wool can be grown, but they are of no great extent, and even there combing wool pays better than clothing wool.

It will be observed that while a clothing wool with a very fine and delicate fibre and short staple, could not altogether withstand the heat of such a climate as that of the Intermediate District, and would to some extent lose its yolk and vitality, a good lengthy combing wool, of fair fineness of fibre, would suit admirably, both from the long staples protecting each other and the comparative stoutness of the vesicles of the fibres, withstanding the heat and retaining the yolk better. Besides, the tendency of wool, so long as it is sound, is to increase in length of staple and stoutness of fibre in hot climates, while it loses in density and fineness; and the grower should work as far as possible with and not against Nature, which he can do in this case without reducing his returns, as combing wool is selling better than clothing, and the larger framed fat wethers bring better prices.

V.—THE SALT-BUSH DIVISION.

This division derives its name from the nature of the soil, *i.e.*, it is true saline or salt-bush country.

Like all the other divisions it extends from the Queensland to the Victorian Borders, but its width on the Queensland boundary (the north) is very much greater than on the Victorian, its average breadth being about 300 miles and its length about 400; and size this division is very much larger than any of the rest.

It is bounded on the east by the western boundary of the Intermediate Division, and on the west by the boundary of South Australia.

The *climate* is hot and dry, but not by any means too much so for the health and growth of the stock, although too hot for the production of the finer descriptions of wool.

In its *natural features* the country lying along the course of the Bogan, Narran, Warrego, Paroo, Darling, Murray, Edward, Murrumbidgee, and Lower Lachlan Rivers, and in many cases for some distance back from these watercourses, may be described as very flat and level, and as forming extensive plains; while on the east side of the Darling there is a considerable extent of hilly country, including the Rankine, M'Culloch, and Cobar Ranges, and a still more extensive tract of the same sort of country in the north-western portion of this division, which stretches westward to the South Australian boundary, the principal of which are the Barrier, the Grey, Bolo, Cadell, Malia, and Scrope's Ranges. There are also numbers of sandhills, eminences, and ranges of low hills, more especially in the country lying towards its north-eastern boundary.

The *soil* is generally light, friable, and sandy, such as is found in a purely salt bush country, with a considerable extent of alluvial land along the valleys of the creeks and rivers, rich deep land on some of the plains, large tracts of poor light land and sand ridges, and in some portions of it heavy belts of scrub.

Except on the country along the banks of the creeks and rivers there is comparatively little *grass* in this division. But the herbage at certain seasons of the year grows well throughout its whole extent, and on the better portions most luxuriantly; while the salt, cotton, and other bushes on which stock do so well are healthy and plentiful.

HORSES.

Very few horses are bred in this portion of the Colony; those used on the stations being mostly from the Western Slopes and Mountainous divisions. This arises through sheep and cattle being of late years much more remunerative than horses; and as this part of the Colony is but comparatively recently settled, owners have put on only paying

stock, and have avoided the mistake which many of their fellow-owners in the older settled divisions made in embarking so largely in horse-breeding. The Salt-bush country, however, is admirably adapted for breeding the lighter description of horses—light-harness and saddle; and there is no doubt that when the prices of this kind of stock become more remunerative—and they are fast tending that way—horse-breeding will be largely and successfully followed in this as well as in the Intermediate district; for with their dry clear atmospheres, their nutritious but at times somewhat scanty pasture, and their long rolling plains, a horse should be produced in these divisions which, if bred from the right stamp of sire and dam, and with due regard to purity of blood, ought to be larger than the Arab, and rival him in speed and endurance.

CATTLE.

No stock do better than cattle in this division. It contains a considerable number, perhaps half a million head, and it is only because sheep have been paying better than cattle that there are not more than twice that number.

SHEEP.

Sheep, like all other stock, thrive remarkably well; but the fleece suffers from the great heat, dust, and occasional shortness of grass and water.

If it be the case that it would be unprofitable to grow clothing wool in the intermediate division; much more would it be a mistake for the reasons adduced to attempt it in this, for clothing fleeces would be only half the weight they ought to be, and the wool harsh, thriftless, and unsound. It is necessary when the climate is very hot, as it is in this division, to increase the stoutness of the fibre with every increase of heat, and to trust to the length of staple and weight of fleece, combined with heavier carcass, to make wool growing pay in that class of country.

THE LIVE STOCK OF THE COLONY.

I.—Horses.

1.—Number and Distribution.

Returns have been sent in by the Inspectors of Sheep of the number and breeds of horses in their districts, but as the information they received from the owners and breeders was very meagre and incomplete, recourse has here been had to the "Statistical Register" for the number of horses in the Colony, and an estimate is formed of the number of the different breeds, and of the classes belonging to these breeds. In the Register the numbers during the last fifteen years stand as follows:—

Year.	No.	Year.	No.
1861	233,226	1869	280,304
1862	273,389	1870	337,597
1863	262,554	1871	304,100
1864	284,557	1872	328,408
1865	282,587	1873	334,462
1866	278,587	1874	346,691
1867	280,210	1875	357,696
1868	280,818		

The larger proportion of our horse stock is to be found in the Coast Mountainous and Western Slopes divisions. Their number is less in the Intermediate division, and very much less in the Salt-bush.

2.—CLASSIFICATION.

The horses in the Colony may be divided according to the uses to which they are applied, into three classes. 1st. Draught; 2nd. Light harness; and 3rd. Saddle. Relatively to each other the different breeds may be stated as $\frac{1}{4}$ th. draught, $\frac{1}{4}$ th. light harness, and $\frac{1}{4}$ ths. saddle. And the following estimate of the merits of the several classes may not be very wide of the mark.

(1.)—Draught.

First-class heavy draught	...	...	...	6,000
Do. farming	...	...	...	13,000
Middling...	...	...	...	19,000
Inferior	...	...	...	21,000
Very inferior	...	...	...	17,000
				16,000
				<hr/> 73,000

(2.)—*Light harness.*

First-class well-bred	11,000
Middling... ..	35,000
Inferior	26,000
	<hr/> 72,000

(3.)—*Saddle.*

Thorough-bred, including Arabs	3,000
Well-bred	18,000
Middling... ..	82,000
Inferior	58,000
Very inferior	51,000
	<hr/> 212,000
	<hr/> 357,000

Besides the above, there are some 60,000 to 80,000 wild horses in the Colony, which cannot be yarded.

3.—MARKET PRICES OF HORSE STOCK.

First class heavy draught.

For breeding purposes.

Entires	£	£
Mares... ..	from 200 to 1,000	
	30	500

For ordinary purposes.

Unbroken	25	40
Broken	30	50

First class farming horses.

For breeding.

Entires	80	300
Mares... ..	30	75

For ordinary purposes.

Broken	20	35
---------------	----	----

Middling draught horses.

Broken	20	30
Unbroken	15	25

Inferior and very inferior draught horses.

Unbroken	8	12
Broken	10	15

Well-bred light harness horses.

Unbroken	20	30
Broken	20	40
Well-matched pairs	60	100

Middling light harness horses.

Unbroken	5	15
Broken	7	20
Well-matched pairs... ..	25	35

Inferior light harness horses.

Unbroken	3	8
Broken	5	15

Well-bred saddle horses.

Unbroken	20	30
Broken	25	50

Middling saddle horses.

Unbroken	5	10
Broken	3	15

<i>Inferior saddle horses.</i>			
Broken	...	2	7
Unbroken	...	5s.	3
<i>Thoroughbreds, for racing purposes.</i>			
Yearlings	...	25	800
<i>Thoroughbreds, for general purposes.</i>			
Entires	...	100	250
Mares...	...	100	200

4.—INDIAN MARKET.

From the returns received from the Inspectors of Stock it would appear that as many as 3,000 horses fit for this market might be annually obtained in the Colony.

II.—CATTLE.

1.—Number.

The following figures are taken from the Statistical Register :—

1861	...	2,271,923	1869	...	1,795,904
1862	...	2,620,383	1870	...	2,295,096
1863	...	2,032,522	1871	...	2,014,888
1864	...	1,924,119	1872	...	2,287,660
1865	...	1,961,905	1873	...	2,794,327
1866	...	1,771,809	1874	...	2,856,699
1867	...	1,728,427	1875	...	3,134,086
1868	...	1,761,411			

The great falling off in the number of the cattle stock from 1862 to 1867 is attributable partly to losses through pleuro-pneumonia, but principally through owners changing their cattle runs into sheep stations. This they did, to some extent, from a dread of the disease, but chiefly because sheep paid much better than cattle. To see how very powerful these reasons must have been with stockowners it is only necessary to state that while the number of cattle was little more in 1875 than in 1862, the sheep had increased from 6,550,896 in 1862 to 24,382,536 in 1875;—in other words, that while in 1875 there were not many more cattle in the Colony than in 1862—fifteen years previously—there were nearly *four* times as many sheep at the former date than at the latter.

It will be seen that of late years cattle have been gradually increasing, but what between the number still lost by pleuro-pneumonia,—the heavy drafts of store cattle which are being constantly sent into Victoria,—the large numbers sold to stock new country in this Colony and Queensland,—the large demand for beef for the preserving companies, and the increasing requirements of the Colony generally for butchers' meat—it cannot be expected that the numbers of this class of stock will very rapidly increase.

2.—Description.

The cattle of this Colony are more Short-horn than anything else. Speaking critically it may be said that there is little uniformity among them in quality or form; and as a rule there is still considerable room for improvement. Their want of uniformity, to a large extent, is of course attributable to the great variety of breeds from which they are descended. There is in them more or less of the blood of all our British and Irish breeds, and even of the cattle of Cape Colony; and as if this was not enough of "differentness" a good many breeders in early days, under the false notion that such a course was necessary to the proper management of their herds, kept up a continual round of changes in their bulls, to the perpetuation of this incongruity and the deterioration of their cattle. The unenclosed state of the country and consequent impossibility of keeping the different breeds separate also tended to check improvement, aided as it was by the scarcity of labour which followed on the outbreak of the diggings.

Although, as we have said there is still, upon the whole, considerable room for improvement in the generality of the herds, the average of the cattle is very far from inferior; and even the very worst make passable beef, and turn out, when fat, a payable quantity of tallow. It is evident too that from the demand for pedigree cattle which has now existed for five or six years, and the high prices they have brought at the Exhibitions and shows (yearling Short-horns, according to their shapes and purity, fetching from £60 to £1,000), that blood is beginning to be appreciated as it ought to be, and that more correct views as to the true principles of breeding are gaining ground. We may expect, therefore, to see the improvement referred to continue and spread.

3.—THE DIFFERENT BREEDS.

The only distinct breeds in the Colony are the Short-horn, Hereford, and Devons, with a single herd of Black Polled, and one or two small herds of Alderney or Channel Island cattle. Say nine-tenths (2,700,000) Short-horn, and one-tenth (300,000) Hereford, Devon, Black Polled, and Alderney.

(1.)—*Short-horns.*

As has been already said, the Short-horn blood is the most prevalent in the Colony, by far the larger proportion of the imported cattle having for the last thirty or forty years been of that breed; and there is little doubt, considering the state of the horned stock, but that this was the best single breed that could have been introduced. The Short-horns are here as in every other part of the world superior to all other cattle in size, squareness, compactness, early maturity, and imposing appearance, and the pure bulls of this breed possess the power in an eminent degree of marking their progeny, and conveying to them the size, substance, and quality for which they are themselves so justly distinguished; in fact they supply the very qualities which Colonial cattle generally lack.

The importations of Short-horns from England have been numerous, considerable numbers having been introduced every year up to the autumn of 1873, when a general prohibition against the importation of stock from places outside the Colonies was promulgated. The quality of the animals imported has as a rule been high; some of them were in fact equal to the best of their day in England and prizetakers at the principal shows there.

During the three years preceding the prohibition 154 Short-horn bulls were imported.

The effect of these importations has been most beneficial, and the best proof which can be adduced in support of this assertion is the contrast which the cattle-stock in Australia present, compared with those of Mexico and South America. While the cattle in these Colonies are highly valuable for both meat and milk, and are yielding a handsome return per head, the cattle of Mexico and South America are comparatively worthless, except for their hides, horns, and bones. They have little or no fat, and their meat is tough and flavourless.

Well bred fat bullocks of this breed off a good run leave it at 3 to 3½ years old weighing from 700 to 800 lbs. net weight, and cows 150 lbs. less, and ordinarily well bred cattle will take 6 months longer to reach the same weights.

The Short-horns in the Colony may be classed as follows:—

Pure stock,	say	8,000
First-class well-bred	„	220,000
Well-bred to fair	„	850,000
Middling,	„	1,400,000
Inferior,	„	182,000
Very inferior,	„	40,000
		<hr/>
		2,700,000

(2) *Herefords.*

The Herefords have proved themselves in Australia to be an excellent race of cattle, with distinctive type, characteristics, and form, thoroughly established and capable of being transmitted to any other race with which they may be interbred. They are especially remarkable for their weight, hardihood, and good meat. They are principally located to the north of Sydney, in the eastern and north-eastern portions of the Colony.

The importations of Hereford cattle during the three years preceding the prohibition amounted to forty-five head.

The effect of the introduction of the Hereford strain into our herds has so far been very satisfactory, and if a constant supply of pure bulls of this breed is kept up in the herds in which it has been tried, still further good results may be expected, as the Herefords are harder, more active, and carry thicker and heavier coats than the Short-horns. They are better suited than the Short-horns for inferior pasturage and outlying runs, and they stand the road and winter better. They come nearly as early to maturity but are not so heavy. A good many owners are now breeding from Herefords, and it is to be expected that they will eventually to some extent displace the Short-horns on the lighter soils and colder country, and on the more distant runs.

Well bred fat bullocks of this breed at 3 to 3½ years will weigh from 650 to 750 lbs.

Estimate of different classes of Herefords.

Pure,	(say)	2,000
First-class well-bred stock,	„	60,000
Well-bred to fair,	„	120,000
Middling,	„	100,000
Inferior,	„	18,000
		<hr/>
		300,000

(3) *Devons.*

Both Devon bulls and cows were imported as early as 1832-3 ; and their progeny made excellent crosses with the cattle then in the Colony, both for meat and milk ; but they did not gain favour with stockowners on account of their wildness. Further importations were subsequently received but they also were mixed with and lost in the general herds, until some thirty years ago when Captain Holder formed a pure Devon herd on the Hunter, which afterwards passed into the hands of Mr. Reynolds, of the Paterson, and until recently was the only pure Devon herd in the Colony. Now, however, with the fencing of the runs Devons are more sought after, and several pure herds have been formed. Still owners generally are not in favour of this breed as they do not like the Short-horn and Hereford possess the qualities which our own cattle lack, *i.e.*, size, squareness, and fulness in the handling points ; and they are too active in their movements for any but careful managers.

During the three years preceding the prohibition there were thirty-seven Devons imported from England.

When we consider the good travelling qualities, and the excellence of the meat of the Devons, there is no doubt but that they will ere long be found on many of the runs in the far back salt-bush country ; and as fencing progresses we may expect to find herds in the outlying districts with Devon cows breeding to Durham and Hereford bulls, the progeny being fattened off and not bred from.

Devon bullocks at 3 to 3½ years old weigh about 600 lbs.

(4.) *Black-polled.*

As in the case of the Devons, there have at various times been importations of this breed, which have been all but lost in the general herds. Lately, however, Mr. Gilchrist, of Sydney, has formed a herd of Black-polled cattle, near Sutton Forest, and as they are a superior race, and especially adapted for crossing with the Short-horn, there is no doubt but that others will follow his example, and that herds of this breed will be established in many parts of the Colony, more particularly in the upland districts.

(5) *Crosses.*

There is a considerable number of herds into which Hereford, and in some few cases Devon, bulls have been introduced ; and there are, therefore, a large number of crosses in the Colony of what may be termed the Short-horn and Hereford, and some of the Short-horn and Devon breeds. These have been included with the "Short-horns."

(6) *Dairy Cattle.*

We have had frequent importations of Ayrshire, Channel Island, and Brittany cattle ; and although none of these breeds, with perhaps two or three exceptions, have been kept pure, we possess a very good description of dairy stock, more particularly in the Wollongong, Kiama, Bega, and Camden Districts.

This class of cattle might, however, be improved ; and if it were safe to remove the prohibition, importations of Ayrshire and Alderneys—the favourite breeds—would be resumed.

4.—*Market Prices of Cattle Stock.*

	Shorthorn.	Hereford.	Devon.
PEDIGREE CATTLE.			
Bulls	Guineas. 50 to 1,500	Guineas. 30 to 500	Guineas. 50 to 300
Cows and heifers.. ..	50 „ 2,000	25 „ 300	25 „ 200
FIRST CLASS WELL-BRED.			
Bulls	30 to 100	20 to 80	20 to 70
Cows and heifers.. ..	20 „ 80	15 „ 50	15 „ 50
WELL-BRED TO FAIR.			
Herd bulls.. .. .	£ s. d. £ s. d. | £ s. d. £ s. d. | £ s. d. £ s. d.	10 0 0 to 30 0 0 | 10 0 0 to 30 0 0 | 10 0 0 to 20 0 0	
Cows and heifers.. ..	7 0 0 „ 15 0 0 | 7 0 0 „ 15 0 0 | 8 0 0 „ 12 0 0	4 10 0 „ 6 0 0 | 4 10 0 „ 5 10 0 | .....	
Stores	4 10 0 „ 6 0 0	4 10 0 „ 5 10 0	5 10 0 „ 6 0 0
Fat cattle .. .. .	.. .. .	25/ to 30/ per 100 lbs.	.. .. .
MIDDLING.			
Breeding cows and heifers	5 0 0 to 6 0 0 | 3 0 0 to 5 10 0 | .....	3 0 0 „ 3 10 0 | 2 10 0 „ 3 0 0 | .....	
Stores	3 0 0 „ 3 10 0	2 10 0 „ 3 0 0	3 0 0 „ 3 10 0
Fat cattle .. .. .	.. .. .	17/6 to 22/6 per 100 lbs.	.. .. .
INFERIOR.			
Cows and bullocks	2 10 0 to 3 0 0 | 2 10 0 to 3 0 0 | .....	2 10 0 to 3 0 0 | 2 10 0 to 3 0 0 | .....	
Fat cattle .. .. .	.. .. .	15/ to 16/ per 100 lb.	.. .. .

The drought of last summer has led to beef being unusually high at present. It generally ranges from 20s. to 25s. per 100 lbs. There is no difference in the price of the beef, whether it be Shorthorn, Hereford, or Devon, but there is a decided preference shown by the butchers for the latter when it can be bought at the same figure as that of the other two breeds.

5.—Value of Annual "Cast" and Export of Fat Cattle.

Taking the cattle in the Colony in round numbers at 3,000,000, and fixing the annual draft or "cast" of fat stock at one-eighth of the whole—the number that would be sold annually from a fair breeding and fattening run in proper working order—we have 375,000. Then taking the average prices in Sydney and Melbourne markets at £6, the gross annual value of the "cast" of fat cattle would amount to £2,250,000.

To show again the amount received annually from the export of the produce of our cattle, we have as above,—

375,000, at 120s.	£2,250,000
Less—	
Consumed in Sydney and Suburbs, as partly estimated and partly obtained from slaughter-house returns, 52,000, at £6	£312,000
Do. in Maitland, and do. as do., do., 18,000, at £6	108,000
Do. in the rest of the Colony, 56,000, at £6	336,000
	<hr/> 756,000

Leaving—

Value of 249,000 cattle sent into Victoria and South Australia, and boiled down and preserved in this Colony, at £6 each.....	1,494,000
Value of hides of cattle slaughtered in the Colony, exported as hides, or leather, as above.....	126,000
Less—used for green hides (say)	26,000
	<hr/> 100,000, at 18s. 90,000
Value of tallow exported from cattle slaughtered (say) ...	75,000
Value of bones, hoofs, horns, &c. (say)	5,000
	<hr/> 170,000

Total annual export from cattle..... £1,664,000

III.—SHEEP.

1.—NUMBER

The number of sheep in the Colony during each of the last fifteen years (from 1861 to 1875) stands as follows :—

1861	6,119,169	1869	16,848,217
1862	6,550,896	1870	16,218,825
1863	7,169,126	1871	17,873,696
1864	9,089,463	1872	18,990,595
1865	9,650,106	1873	20,709,338
1866	11,644,593	1874	22,767,416
1867	15,066,377	1875 ..	24,382,536
1868	16,000,000		

2.—Different Breeds of Sheep.

The sheep of this Colony are almost entirely of the Merino breed, there being only about 300,000 or 1-80th of the Long-wooled breeds, and crosses of these breeds with the Merino, out of the 24,000,000 sheep now in the Colony.

(1.) The Merino.

There are two principal divisions of Merinos—the "Combing" and "Clothing," and these again may be divided into 3 classes, viz.—(1) "fine," (2) "medium," (3) "strong" woolled.

The number of sheep in each of these principal divisions, "Combing" and "Clothing," are now about equal, but the Combing division is increasing faster than the Clothing, as the longer stapled wools are more in demand.

As to the size of the sheep in the classes mentioned, it may be stated that the fine woolled fat wethers of both divisions average about 50 lbs., the medium about 60 lbs., and the strong woolled about 65 lbs.; while sheep of the first of these classes clip of washed wool about 2 lbs. 12 ozs., the second about 3 lbs., and the third about 3 lbs. 4 ozs.

The Merinos may be classed as follows :—

Pedigree Stud sheep	300,000
Highly-bred Stud sheep	1,400,000
Well-bred „	3,000,000
Middling sheep.....	13,000,000
Inferior „	4,000,000
Very inferior sheep	2,000,000
	<hr/>
	23,700,000

(2.) *Long-woolled and Cross-bred Sheep.*

Of these there are about 300,000 in the Colony which may be classified as follows :—

Leicesters	30,000
Lincolns	20,000
Downs, Cotswolds, and other breeds	30,000
Crosses.....	220,000
	<hr/>
	300,000

Of these breeds again, the Leicesters and Lincolns are most in favour on account of the excellence of their wool, and they are increasing every year; for where the soil is rich and the pasture good they are more remunerative than the Merino, both when crossed with that breed and when kept pure.

3.—*Importation of Stud Sheep.*

Sheep from the best German, French, and American flocks have from time to time been introduced and interbred with our Australian merino, producing some remarkably fine sheep; but upon the whole none can excel the Australian merino, descended from the original Camden stock, either in the quality of the fleece or the certainty with which pure rams from this family mark their progeny; and for these we have to look to our own far-famed Mudgee and Merriwa flocks in this Colony; to those of Messrs. Learmonth, Currie, Cumming, Shaw, and others, in Victoria; to those of Messrs. Kermod, Gibson, Taylor, and others, in Tasmania; and to Mr. Fisher, formerly of South Australia, but now of Victoria and New South Wales.

Previous to 1864 no record was kept of the importations of stud sheep. Since that time some 5,000 have been introduced from Victoria, about one-half of which were ewes, and 1,000 from Tasmania, New Zealand, America, England, France, and Germany. Since June, 1873, importations have been prohibited from places outside the Australian Colonies.

4.—*Improvement of our Sheep.*

Although the losses sustained in the vain attempt to grow fine wool upon large-framed sheep, by crossing the Merino ewe with the Leicester and Southdown ram, taught those who made it that their theories were unsound and their plans impracticable, it was not until the last six or eight years that really sound ideas on the subject of sheep-breeding began to be general throughout the Colony, and they have still room to spread. Since 1868-9, when the march of improvement began, it has been moving on with certainty. This change for the better was greatly accelerated by the heavy fall, in the beginning of 1868, in the price of wool, which led owners to try every means in their power to enhance the value of their clip, and improve the quality of their sheep.

What, therefore, with more correct ideas on the proper system of breeding, the purchase of a better class of stud rams, and the close culling and correct classing of the ewes, (which have now been going on for several years), very great improvement has taken place in the wool on most of the larger stations; and the example thus set has been followed on the smaller holdings. The fencing in of the runs has also tended in a large degree in the same direction, not only through the immediate improvement in the quality and weight of the fleece, which always follows the turning out of sheep, but also in relieving the owner from the care and trouble of *managing* the hosts of shepherds and hut-keepers employed on the station while the sheep were shepherded, and allowing him to turn his attention to raising the character of his sheep and clip.

5.—*Lambing.*

The general average percentage of lambs for the whole Colony (counting dry ewes) during the last five years is about 74 per cent.

6.—*The clip.*

The general average Merino clip per sheep for the whole Colony during the last five years is as follows :—

	lb.	oz.
Greasy	4	12
Creek washed	2	13
Hot water	2	9
Scoured	2	10

Some superior sheep have clipped as much as 12 and 14lbs. in the grease, or 6 to 7lbs. clean washed combing wool of high standard quality.

In the preparation of the wool for market also sheep-owners have within the last five or six years made very great advancement. On many of the principal stations the hot-water system has been adopted, and very large sums have been expended in steam engines, pumps, spouts, and other machinery and appliances, while most of those who still stick to the cold-water wash have dropped the rough and ready careless customs, which the scarcity of labour during the diggings induced, and have fallen back upon the more careful systems followed some twenty years ago.

7.—*Combing and Clothing Wool.*

It is of course most essential for sheep farmers to know what description of wool ("combing" or "clothing," "fine" or "strong") can be most profitably grown on their stations; and this question they are as a rule now steadily engaged in solving. In fact many of them have already ascertained the class of sheep that suits their country best, and are reaping the benefit in increased returns for their clips.

8.—*Market Prices of Sheep.*

	Merino.	Lincoln.	Leicester.	Downs and Others.
PEDIGREE STUD SHEEP.	Guineas.	Guineas.	Guineas.	Guineas.
Rams	30 to 500	20 to 150	20 to 60	3 to 5
Ewes	15 ,, 200	30 ,, 50	10 ,, 30	1 ,, 4
HIGHLY BRED.				
Rams	10 to 50	20 to 30	7 to 20	1 to 2
Ewes	10 ,, 40	10 ,, 20	5 to 15	1 to 2
WELL BRED.	£ s. d. £ s. d.	£ s. d. £ s. d.	£ s. d. £ s. d.	£ s. d. £ s. d.
Rams	3 0 0 to 8 0 0	5 0 0 to 10 0 0	4 0 0 to 8 0 0	1 0 0 to 1 10 0
Picked ewes	2 0 0 ,, 5 0 0	4 0 0 ,, 8 0 0	4 0 0 ,, 8 0 0	1 0 0 ,, 1 10 0
Stores	0 7 0 ,, 0 9 0	1 0 0 ,, 1 10 0	1 0 0 ,, 1 10 0	0 17 6 ,, 1 5 0
Fat sheep	0 9 0 ,, 0 14 0	1 5 0 ,, 1 15 0	1 0 0 ,, 1 15 0	0 16 0 ,, 1 10 0
MIDDLING.				
Picked breeding ewes	0 8 0 to 0 10 0	.....	.....	.....
Stores	0 6 0 ,, 0 7 0	.....	.....	.....
Fat sheep	0 7 0 to 0 8 0 0	0 12 0 to 0 17 6	0 10 6 to 0 15 0	.....
INFERIOR.				
Stores	0 3 9 to 0 5 6	.....	.....	.....
Fat Sheep	0 5 6 ,, 0 7 0	.....	.....	.....

The Merino Mutton is preferred to any but the Southdown.

9.—*Value of Annual Produce from Sheep.*

From the vague manner in which the description of the wool and the weights are stated in the entries passed, the account kept by the Customs cannot be relied upon as correct in arriving at a conclusion as to the actual amount of our clip. The uncertainty is also increased by the way in which wool arrives in and leaves the Colony. Nearly one half of the wool goes across the Murray by Melbourne, or down that river by Adelaide, and some even across the Border by Brisbane; while on the other hand some of the Queensland wool comes into New South Wales by land, and large quantities by sea.

The most correct mode of arriving at an estimate of the yield of wool and value of the clip will therefore be to take the number of the sheep according to the sworn returns of owners for 1875, allow say 2½lb. off washed wool per sheep, and a fair average price in

Sydney for washed wool for the season of 1875 of (say) 1s. 6d. per lb.; this, with 24,000,000 sheep, would give 66,000,000lbs., and that at 1s. 6d. per lb. would be £4,950,000 as the value of the clip for 1875.

To arrive at anything like a correct estimate of the value of the annual "cast" of fat sheep, it is necessary to take again the total number of sheep in the Colony, and fix on a fair per centage of those annually sold as fat from a breeding and fattening station of average quality in proper working order. There is of course a great deal of country which is too poor to fatten sheep; but there are on the other hand many runs which are kept entirely for fattening, and they would prepare the sheep for the butcher which were bred on the poorer runs. Taking everything into consideration the annual "cast" of fat sheep may be fairly fixed at *one-fifth* of the whole number, and the price at 10s. each. This, with 24,000,000 sheep, would give 4,800,000 sheep, and these at 10s. each would make £2,400,000.

10.—Annual Export of Produce from Sheep.

An estimate of this may be arrived at as follows:—

Annual cast of fat sheep as above	4,800,000
--	-----------

Less.

Consumed in Sydney and suburbs, as partly estimated and partly ascertained from slaughter-house returns	600,000
Consumed in Maitland and neighbourhood, do. do. ...	180,000
Consumed in the rest of the Colony (estimated) ...	720,000
	<hr/> 1,500,000

Leaving

To be sent into Victoria and South Australia, and to be boiled down and preserved in this Colony, (say)	3,300,000
---	-----------

Then taking

These sheep at the same price as above, there would be 3,300,000 @ 10s.	1,650,000
Amount for wool as above	4,950,000
Add tallow and skins from sheep slaughtered for food ...	150,000
	<hr/> £6,750,000

N.B.—The number of sheep that went from this Colony in 1875 into Victoria was 1,160,200, and into South Australia 87,933, making together 1,248,133.

GENERAL REMARKS.

Income from, and Value of, Pastoral Property, and its Prospective Increase.

I.—INCOME.

The present annual return from horses, cattle, and sheep, may be estimated as follows:—

	£
Say one-tenth of the number of horses in the Colony (357,696)—say 35,000 disposed of annually at an average price of £8 per head	280,000
Cast of fat cattle as given above, say	2,250,000
„ sheep do.	2,400,000
Clip of 1875 do.	4,950,000
	<hr/> £9,880,000

II.—VALUE.

The above amount, say £9,880,000, capitalized at 33½ per cent.—the gross return pastoral properties should yield to cover risk, interest, and expenses—gives £29,640,000 as the present value of the pastoral property of the Colony.

To show that this is very near the mark, the stock may be taken at their average value during the last ten years, with the runs, purchased land, and improvements given in, and we have—

				£
350,000 horses, at (say) 60/	...	...	...	1,050,000
3,000,000 cattle, „ 86/6	...	...	...	12,975,000
24,000,000 sheep „ 13/	...	...	...	15,600,000
				<u>£29,625,000</u>

A good deal of the stock are running on purchased land, and where they are the amount invested is of course proportionately larger.

III.—PROSPECTIVE INCREASE.

What between the improvements which have been made by water-saving and fencing on the badly-watered and open runs, formerly but partially stocked, which now carry fully one-half more, and the occupation and improvement of the unstocked dry country in the same way, the live stock in the Colony have, as we have shown, increased with amazing rapidity during the last ten or twelve years; and there is not the slightest doubt that this increase will continue for many years to come, as there is ample scope for its further development, both by improving the present holdings and the stocking of new country not yet occupied. It is quite within the mark to say that ten years hence there will be 500,000 horses, 5,000,000 of cattle, and 40,000,000 of sheep in this Colony; and that instead of the present gross income from pastoral property being, as it is now, estimated at £9,880,000, it will be £16,400,000. The capabilities of the runs in many parts of the Colony have been very largely increased by water-saving and fencing, and now that the fee-simple of large tracts of these runs have passed into the hands of the Crown tenants and others, improvements will be made to a very much larger extent, and the returns from pastoral properties proportionately increased.

The fencing already completed extends to *hundreds of thousands of miles*; and the amount expended in fencing, water saving, and other improvements, is under estimated at £6,000,000 sterling.

IV.—MARKET PRICE per head of stock with the Run given in of fairly stocked properties held under lease from the Crown.

Sheep Stations.		With Sheep.		
		Well-bred.	Middling.	Inferior.
Superior as to climate, soil, water improvement, and position.		20/ to 25/	16/ to 18/	12/ to 15/
Good	„	15/ „ 18/6	13/6 „ 16/	10/ „ 12/6
Middling	„	12/ „ 14/	10/ „ 13/	8/ „ 9/
Inferior	„	10/ „ 13/	8/ „ 9/	6/ „ 7/6
Cattle Runs.		With Cattle.		
		Well-bred.	Middling.	Inferior.
Superior as to climate, soil, water improvement, and position.		140/ to 160/	120/ to 135/	80/ to 110/
Good	„	120/ „ 140/	100/ „ 120/	70/ „ 90/
Middling	„	90/ „ 110/	80/ „ 100/	60/ „ 80/
Inferior	„	70/ „ 80/	60/ „ 70/	50/ „ 60/

V.—PRICE OF FREEHOLD PASTORAL LAND PER ACRF.

Superior.	Good.	Middling.	Inferior.
30/ to 40/	25/ to 30/	17/6 to 23/	10/ to 15/

ALEXANDER BRUCE.

Sydney, 30th May, 1876.

GOVERNOR.

His Excellency Sir Hercules George Robert Robinson, G.C.M.G., Governor, Commander-in-Chief.

Aide-de-Camp—Captain Beauchamp St. John, 73rd Foot.

Private Secretary—Hon. Walter Hely-Hutchinson.

EXECUTIVE COUNCIL.

PRESIDENT :

Sir Hercules George Robert Robinson, G.C.M.G.

MEMBERS :

Hon. John Robertson, Colonial Secretary.

Hon. Alexander Stuart, Colonial Treasurer.

Hon. Joseph Docker, Minister of Justice and Public Instruction.

Hon. Thomas Garrett, Secretary for Lands.

Hon. John Lackey, Secretary for Public Works.

Hon. John Fitzgerald Burns, Postmaster General.

Hon. John Lucas, Secretary for Mines.

CLERK OF THE EXECUTIVE COUNCIL :

Alexander Campbell Budge.

PARLIAMENT OF NEW SOUTH WALES.

LEGISLATIVE COUNCIL.

Officers :

President—Hon. John Hay.

Chairman of Committees—Sir J. G. I. Innes.

Clerk of the Parliaments—John J. Calvert.

Clerk Assistant—Adolphus P. Clapin.

Usher of the Black Rod—H. J. T. Shadforth.

List of Members of the Legislative Council.

The Honorables

- | | |
|------------------------------------|--|
| 1. Allen, George. | 20. Lord, Francis. |
| 2. Blaxland John. | 21. Macarthur, Sir William, Knight. |
| 3. Busby, William. | 22. *Manning, Sir William M., Knight, |
| 4. Byrnes, William. | Q.C. |
| 5. Campbell, John. | 23. Montefiore, Jacob Levi. |
| 6. Campbell, Alexander. | 24. Moore, Henry. |
| 7. Campbell, Charles. | 25. Ogilvie, Edward David Stuart. |
| 8. Chisholm, James. | 26. Owen, Robert. |
| 9. Cox, George Henry. | 27. Richardson, John. |
| 10. Cox, Edward King. | 28. Russell, Bourn. |
| 11. Darley, Frederick Matthew. | 29. Samuel, Saul, C.M.G. |
| 12. De Salis, Leopold Fane. | 30. Smart, Thomas Ware. |
| 13. Docker, Joseph. | 31. Smith, John, M.D. |
| 14. Fairfax, John. | 32. †Stephen, Sir Alfred, C.B., K.C.M.G. |
| 15. Frazer, John. | 33. Thomson, Sir Edward Deas, C.B., |
| 16. Gordon, Samuel Dean. | K.C.M.G. |
| 17. Hay, John. | 34. Watt, John Brown. |
| 18. Holt, Thomas. | 35. Weekes, Elias Carpenter. |
| 19. Innes, Sir Joseph George Long. | 36. White, James. |

* Recently appointed a Judge of the Supreme Court.

† Lieutenant Governor. Sir Alfred Stephen occupied the position of Chief Justice of the Colony for a period of more than thirty years; a length of service in that capacity probably without a parallel.

LEGISLATIVE ASSEMBLY.

*Officers.**Speaker*—Hon. G. Wigram Allen.*Chairman of Committees*—Richard Driver.*Clerk of the Assembly*—Stephen W. Jones.*Clerk Assistant*—Frederick W. Webb.*2nd Clerk Assistant*—John A. Vivian.*Sergeant-at-Arms*—Lawrence J. Harnett.*List of Members of the Legislative Assembly.*

1. Abbott, Robert Palmer (Tenterfield).
2. Allen, George Wigram (The Glebe).
3. Baker, Ezekiel Alexander (Gold Fields South).
4. Bawden, Thomas (The Clarence).
5. Bennett, Hanley (Liverpool Plains).
6. Booth, John (East Macquarie).
7. Brown, Stephen Campbell (Newtown).
8. Brown, H. H. (Paterson).
9. Browne, William Charles (Patrick's Plains).
10. Buchanan, David (Gold Fields West).
11. Burns, The Hon. John Fitzgerald (The Hunter).
12. Butler, Edward (Argyle).
13. Byrnes, C. J. (Parramatta).
14. Cameron, Angus (West Sydney).
15. Clarke, Henry (Eden).
16. Charles, Captain (Kiama).
17. Cohen, H. E. (West Maitland).
18. Cunneen, James Augustine (Wollombi).
19. Dangar, H. C. (West Sydney).
20. Dangar, Thomas Gordon Gibbons (The Gwydir).
21. Davies, John (East Sydney).
22. Day, G. (The Hume).
23. Dibbs, G. R. (West Sydney).
24. Driver, Richard (Windsor).
25. Farnell, James Squire (St. Leonards).
26. Fitzpatrick, Michael (Yass Plains).
27. Forster, R. H. M. (Gold Fields North).
28. Garrett, The Hon. Thomas (Camden).
29. Gray, S. W. (Illawarra).
30. Greville, Edward (Braidwood).
31. Hay, William (The Murray).
32. Hill, Richard (Canterbury).
33. Hoskins, James (The Tumut).
34. Hurley, James (Hartley).
35. Hurley, John (Narellan).
36. Jacob, Archibald Hamilton (Lower Hunter).
37. Lackey, The Hon. John (Central Cumberland).
38. Leary, Joseph (Murrumbidgee).
39. Long, William (Central Cumberland).
40. Lloyd, George Alfred (Newcastle).
41. Lord, George William (The Bogan).
42. Lucas, The Hon. John (Canterbury).
43. Lynch, Andrew (Carcoar).
44. McElhone, J. (The Upper Hunter).
45. Macintosh, John (East Sydney).
46. Montague, Alexander (Monaro).
47. Moses, Henry (The Hawkesbury).
48. Nelson, Harris Levi (Orange).
49. Onalow, Arthur Alexander Walton, Captain, R.N. (Camden).
50. Parkes, The Hon. Henry (East Sydney).
51. Phelps, Joseph James (Balranald).
52. Piddington, William Richman (The Hawkesbury).
53. Pilcher, C. E. (West Macquarie).
54. Robertson, The Hon. John (West Sydney).
55. Rouse, R. (Mudgee).
56. Scholey, Stephen (East Maitland).
57. Shepherd, Major (The Nepean).
58. Smith, John Samuel (Wellington).
59. Smith, Robert Burdett (The Hastings).
60. Stevens, C. J. (Northumberland).
61. Stuart, The Hon. Alexander (East Sydney).
62. Sutherland, J. (Paddington).
63. Suttor, F. B. (Bathurst).
64. Suttor, W. H. (East Macquarie).
65. Taylor, Hugh (Parramatta).
66. Teece, Wm. jun. (Goulburn).
67. Terry, Samuel Henry (New England).
68. Warden, James (Shoalhaven).
69. Watson, James (The Lachlan).
70. Watson, William (The Williams).
71. Windeyer, W. C. (University of Sydney).
72. Wisdom, Robert (Morpeth).
73. Wright, J. J. (Queanbeyan).

THE TARIFF OF NEW SOUTH WALES.

	s.	d.
Spirits—On all kinds of Spirits imported into the Colony, the strength of which can be ascertained by Sykes' hydrometer, the proof gallon ...	10	0
On all spirits and spirituous compounds imported into the Colony, the strength of which cannot be ascertained by Sykes' hydrometer, the liquid gallon...	10	0
Methylated spirits, per gallon...	2	0
Wines—sparkling, per gallon ...	6	0
Other kinds do. ...	4	0
Sarsaparilla, if containing not more than 25 per cent. of proof spirit, per liquid gallon ...	4	0
Beer, ale, porter, spruce, or other beers, in wood or jar, per gallon ...	0	6
Do. do. in bottle, per gallon ...	0	9
Cigars, per lb. ...	5	0
Snuff, per lb. ...	2	0
Tobacco, Manufactured, per lb. ...	2	0
„ Unmanufactured, per lb. ...	1	0
„ „ for sheepwash, per lb. ...	0	3
Opium (including all goods, wares, and merchandise, mixed or saturated with opium or with any preparation or solution thereof or steeped therein), per lb. ...	10	0
Coffee, chicory, cocoa, and chocolate, per lb. ...	0	3
Tea, per lb. ...	0	3
Sugar, raw, per cwt. ...	5	0
„ Refined, per cwt. ...	6	8
„ Molasses and treacle, per cwt. ...	3	4
Malt, per bushel ...	0	6
Hops, per lb. ...	0	3
Comfits, confectionery, and succades, per lb. ...	0	1½
Cordage and rope, per ton ...	40	0
Paints, per ton ...	40	0
Nails, per ton ...	40	0
Galvanized iron, in bars, bundles, or sheets, or corrugated, per ton ...	40	0
Galvanized manufactures, per cwt. ...	3	0
Vinegar, per gallon ...	0	6
Turpentine, per gallon ...	1	0
Varnish, per gallon ...	2	0
Sago, ginger, jams, jellies, nuts of all kinds (except cocoanuts), preserves, biscuits, blue, dates, mustard, starch, maizena, and corn flour, per lb. ...	0	1
Dried, preserved, and salt fish, per lb. ...	0	1
Powder, blasting, per lb. ...	0	1
„ sporting, per lb. ...	0	3
Shot, per cwt. ...	5	0
Woolpacks, each ...	0	3
Bags and sacks, per dozen ...	1	0
Gunny bags, per dozen ...	0	6
Cheese, dried fruits, pepper, spices, bacon, and hams, per lb. ...	0	2
Candles, per lb. ...	0	1
Cement, per barrel ...	2	0
Bottled fruits (quarts), per dozen ...	2	0
„ (pints and smaller packages), per dozen ...	1	0
Rice, per ton ...	60	0
Iron wire, per ton ...	20	0
Salt and saltpetre, per ton ...	20	0
Soda crystals, per ton ...	20	0
Timber—dressed, per 100 superficial feet ...	2	0
„ Rough and undressed, do. ...	1	0
Oilmen's stores—sauces and pickles, quarts, per dozen ...	1	0
„ „ pints and smaller quantities ...	0	6
Paper—writing and fancy, per lb. ...	0	1
„ Brown and wrapping, per cwt. ...	3	4
Oils of all kinds (except animal, sperm, black, and cocoanut), per gallon ...	0	6
Doors, sashes, and shutters, each ...	1	0

IMMIGRATION REGULATIONS.

Colonial Secretary's Office,
Sydney, 19th September, 1876.

HIS Excellency the Governor, with the advice of the Executive Council, directs the publication of the following Regulations for the promotion of Immigration, in lieu of those dated the 16th May, 1873, viz. :—

1. All Immigrants from Great Britain and other parts of Europe shall be approved by the Agent General, or by such persons as he may appoint for the purpose. And the Agent General is hereby authorized to make all necessary appointments, and otherwise to carry out all duties to ensure the efficiency of the Immigration Service under these Regulations and under instructions from the Colonial Secretary.

2. All such Immigrants, other than those nominated by residents in the Colony, shall be selected by the Agent General, or by some other officer duly authorized in that behalf.

3. Approval of such Immigrants from the United Kingdom shall be limited to such persons between the ages of twelve years and fifty years, as shall pay, or for whom there shall have been paid, a deposit of £2; and for children coming with their parents, between the ages of three years and twelve years, the sum of £1, and younger children without charge. In approving of Immigrants, regard will be had to the relative numbers of the population of the Colony from the three Kingdoms, according to the latest Census. Payments in the Colony to be made to the Agent for Immigration in Sydney, and in the Country districts to the Clerks of Petty Sessions, or in London to the Agent General.

4. Similar Immigrants from the Continent of Europe may be in like manner approved on payment being made in each case to any officer duly authorized in that behalf, of an amount to be fixed, with reference to the different rates of passage thence to the Colony, so that the Colony shall pay no more passage money for them than the average rate from the United Kingdom: Provided that not more than one-eighth of the funds authorized by Parliament shall be so expended.

5. In like manner, and under similar Regulations, Immigrants may be approved from the Eastern portion of the United States, by an agent to be appointed by or with the approval of the Colonial Secretary: Provided that not more than one-fourth of the funds authorized by Parliament shall be so expended, and provided that none of such Immigrants be Asiatics, and that such Immigrants shall pay towards their passage not less than Immigrants from Great Britain.

6. The persons to be introduced shall be of sound mental and bodily health and of good moral character, and shall consist of mechanics, miners, domestic servants, farmers, vinedressers, and any other descriptions of labourers suitable for country pursuits, and to be chosen with a special view to the promotion of the industrial pursuits of the Colony.

7. Married people, with their children, and unmarried men shall be allowed to remain on board four clear days after the ship anchors in Port Jackson, and unmarried women shall be received into an Immigrants' Home, and shall be allowed to remain there for eight clear days under the control of the Agent for Immigration.

8. Immigrants desiring to proceed, within three clear days of their arrival, to the country districts, will be allowed free passages by railway and steamboat.

9. Immigrants from the United Kingdom must be brought out in ships subject to the Regulations under the Queen's Order in Council, dated February 25, 1856, prescribing rules for preserving order, promoting health, &c., on board Passenger Ships, and the additional Regulations provided by the Board of Emigration in England; also, under such further Regulations as the Agent General may make and prescribe for their moral and sanitary condition during the passage, and those from the Continent of Europe and from the United States, subject to such Regulations as may be determined by the Agent General or other Officer duly authorized in that behalf. No allowance will, under any circumstances, be made in favour of any person taking a cabin or intermediate passage.

10. In the event of any person for whom a deposit has been paid for a passage declining to emigrate or not being able to comply with the conditions required by these Regulations, or in case the amount deposited shall exceed that required for the number of Immigrants actually introduced, the amount deposited, or the amount in excess, as the case may be, will be returned to the depositor by the Agent General, in London, on satisfactory proof being shown to justify such course, or by the Agent for Immigration, in Sydney, on return of the passage certificate, or upon the receipt of the Agent General's report.

11. Persons who make deposits, or for whom deposits are made, will, on approval, receive a passage certificate, which certificate will be available for one year only from the date thereof.

JOHN ROBERTSON,

ALASIA

aggregat Year 1875.

he Registrar G

of Imports er head Population.			of Ex		No. of Horses in 1875.	No. of Cattle in 1875.	No. of Sheep in 1875.	No. of Pigs in 1875.
£	s.	d.						
22	13	1	13	6	357,696	3,134,086	24,382,536	199,950
20	9	5	14	7	196,184	1,054,598	11,749,532	140,765
20	7	2	4	8	107,164	219,240	6,179,395	100,562
19	6	0	3	8	121,497	1,812,576	7,227,774	46,447
11	8	3	1	0	23,473	118,694	1,719,768	47,664
13	4	5	3		29,379	50,416	881,861	14,420
17	18	1	38	3	835,393	6,389,610	52,140,866	549,808
22	7	5	5	1	199,859	1,494,917	11,704,853	123,921
8	10	10	44	1	935,252	6,884,527	63,845,719	673,729

om South Australia to June 1875 (806,760) has been used in making this calculation.
Straits. Last year's return.

Sydney : Thomas Richards, Government Printer.—1876.







3 2044 021 680 855

